“I need to hear and speak and do.” An exploration of the self-efficacy of teaching assistants supporting pupils with autism in mainstream primary schools.

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Abstract

The number of children with autism (ASD) within UK schools is significant. 25.9% of pupils with a Statement of Special Educatonal Needs (SEN) or Education Health Care (EHC) plan have Autistic Spectrum Disorder (ASD) identified as a primary need (DfE. 2016). Children in primary schools with ASD might be supported by teaching assistants (TAs) despite research which indicates that when this support is not appropriately planned or targeted, attainment might be reduced (Blatchford, Bassett, Brown, Martin et al. 2009; Farrell, Alborz, Howes, & Pearson, 2010)

Self-efficacy (SE) impacts upon the way in which people feel, think and behave (Bandura, 1977). Four main sources of information for SE beliefs are postulated by Bandura (1997): mastery experiences; vicarious experiences; verbal or social persuasions; and physiological and affective states.

Previous research has assessed SE in teachers of pupils with autism (Ruble, Toland, Birdwhistell, McGrew et al*.,* 2013), TAs supporting pupils with ASD in secondary schools (Symes & Humphrey, 2011), and SE in TAs (Higgins & Gulliford, 2014), but there is no published research which examines SE in TAs supporting children with ASD in primary schools.

A mixed methods design was employed to explore the SE of TAs using a three-phase approach. First, a focus group (N=8) was used to gain an understanding of the construct of SE in TAs supporting children with ASD. The data were then used to adapt the Autism Self Efficacy Scale for Teachers (ASSET) questionnaire (Ruble et al*.,* 2013) producing a 36-item domain-specific tool for use with a wider population. This measure, named the TASCA (Teaching Assistants Supporting Children with Autism), was completed by 50 TAs. Phase 3 used semi-structured interviews with the 2 TAs gaining highest and 2 gaining lowest SE scores on the TASCA, in order

to provide further rich data in relation to the construct. Data were then thematically analysed in relation to Bandura's (1997) four sources of SE.

The TASCA questionnaire proved to be a highly reliable measure and warrants further development in line with the item analysis. The qualitative data identified that, in line with previous research literature, the role of the TA supporting a child with ASD remains ill-defined, training and support is low, and staff rely upon ad hoc approaches to manage the child on behalf of the teacher. The role can prove challenging, and emotional demands are significant.

The implications of the findings for Educational Psychology practice and future research are considered.

Chapter 1 - Introduction

1.1. Introduction

In this chapter, an overview of the research study is provided. Brief discussion of the focus is provided, with a rationale offered for its selection for the study. The research questions are outlined, and the theoretical framework is introduced. The distinctive contribution of the research and relevance to Educational Psychology practice is explored.

1.2. The research focus

1.2.1. Pupils with ASD in mainstream primary schools.

When this study began in 2014, a total of 17.9% of pupils were identified as having SEN. This figure included those with a statement of special educational needs (SEN) (now Education, Health and Care, or EHC plan), in addition to pupils at School Action and School Action Plus (now SEN Support), where extra or different help is given from that which is provided as part of the school's usual curriculum. For pupils with statements the most common primary type of need was identified as ASD (22.9%). 26.2% of pupils with a statement or EHC plan attend maintained primary schools (DfE, 2014).

Thus, given the significant numbers of pupils being identified as having ASD (Barnhill, Polloway, & Sumutka, 2011; DfE, 2014), teaching staff are increasingly faced with the task of including pupils with ASD in the mainstream primary classroom (Loiacono & Valenti, 2010).

1.2.2. The deployment of teaching assistants to support pupils with additional needs.

There has been a stable growth in the number of TAs working within mainstream schools in England. Department for Education (DfE) statistics provided in 2013 indicated that between 2000 and 2012 the number of TAs working in mainstream nursery, primary and secondary schools almost tripled, with numbers increasing from 79,000 to 232,000. TAs are part of the whole school approach to special educational needs and disability (SEND), ostensibly working in partnership with the classroom/subject teacher and the Special Educational Needs Coordinator (SENCo) to deliver pupil progress and narrow gaps in performance (Special Educational Needs and Disability code of practice: 0-25 years, 2014).

Schools make decisions around TA deployment, depending upon a range of factors within the organisation. To be most effective, the support TAs provide should be focused upon the achievement of specific outcomes within the graduated approach to SEN support, agreed with parents and within the context of high quality teaching for all children. It is appropriate for TAs to be part of a package of support to the child, but this should not be a substitute for teacher involvement with the child. (Special Educational Needs and Disability Code of Practice: 0 to 25 years, 2014).

Despite the widespread use of TAs to support pupils with ASD in mainstream settings, little systematic research into this area exists. Studies have evaluated the impact of TAs in primary, secondary and special school settings; however, little research has sought to explore the TA experience in relation to pupils with SEN, fewer still explicitly exploring the support of pupils with ASD (Farrell et al., 2010).

Very little training on evidence-based approaches to supporting children with ASD is provided within higher learning institutions (National Research Council, 2001). One might expect that still less is available to TAs working

under direction of the classteacher. Therefore, understanding how best to support the SE of TAs who support pupils with ASD is crucial given the greatly increased risk of negative outcomes for these pupils within mainstream education (Barnard, Prior & Potter, 2000; DfE, 2014).

1.2.3. The theory of self-efficacy.

There is a large body of research based upon Bandura's (1997) social cognitive theory of SE, in which he suggests that the control an individual exercises over his life is influenced by the strength of beliefs in one's capabilities to organise and execute the courses of action required to produce given attainments.

The literature exploring teacher SE has burgeoned, and the impact of low SE upon a range of factors, such as poor coping and teacher burnout, has been identified (eg., Schwarzer & Hallum, 2008; Lee, Patterson, & Vega, 2011). Hastings and Brown (2002) discovered that teachers in special education who had low assessed levels of SE perceived that they did not successfully manage students' challenging behaviours. Those teachers were also more likely to have negative emotional reactions to those behaviours. Nieto (2005) asserted that a lack of teacher efficacy can significantly undermine even the best teacher training and stressed the importance of assessing levels of SE and ways of improving it.

The research literature relating to TA SE is sparse. Symes and Humphrey (2011) examined the school factors that facilitate or hinder the ability of teaching assistants to effectively support pupils with ASD in mainstream secondary schools, and TA SE and its susceptibility to influence in training were further examined by Higgins and Gulliford (2014). However, TA SE in relation to pupils with ASD within primary schools is not represented within the published literature. This would therefore appear to be a highly appropriate area for exploration.

1.2.4. The current study.

This study aims to explore the self-efficacy (SE) of teaching assistants (TAs) supporting children with ASD within mainstream primary schools. On the basis of the literature review, three questions will be asked. These will inform the three phases of the study:

- What constructs do TAs report in relation to their performance of their role in supporting pupils with ASD?
- What SE ratings do TAs give in relation to supporting pupils with ASD?
- What SE beliefs do TAs report in relation to supporting pupils with ASD?

1.3. Distinctive contribution to the discipline

Following a review of the current literature, the research questions identified focus upon a specific area which is not represented within the published research. Although numbers of children with a diagnosis of ASD are increasing year on year, and increasing expectations are being placed upon mainstream school staff to ensure optimal educational outcomes for these children, TA SE in relation to supporting such children, has not been examined. This piece of work is therefore an original exploration and one which addresses a gap within the literature.

1.4. Relevance to educational psychology practice

Educational Psychologists are widely involved in research and evaluation. Given the significant prevalence of children with ASD within mainstream primary schools (DfE, 2014), and the associated number of TAs who support

these pupils who are at high risk, it would appear crucial to understand the role that educational psychologists might play.

Factors identified to impact upon, or to support and maintain TA SE in relation to supporting pupils with ASD might lead to service or Local Authority (LA) investment in the provision of opportunities such as training and supervision from the educational psychology service. This could be an effective use of resource in addition to optimising pupil outcomes and impacting positively upon the school and family unit. Investment in SE can reduce burnout and stress and support retention in teachers and may have the same impact for TAs.

“Scientifically based research” (Slavin, 2008) requires a robust empirical evidence base; however, Cline (2012) contends that this is insufficient in itself. Professional judgement which is developed through professional practice must also be brought to bear upon the findings. This means that practice can be modified and targeted in relation to the local context. Such research will therefore enrich the offer to families, schools and communities within the LA.

Schon (1983) describes the training needs of a reflective practitioner and suggests that the core of knowledge and research is deployed by “professional artistry”. If we are to find “what works” we need to see which conditions are required for success. Once we have found this we can add value to our interventions as practising psychologists.

1.5. Motivation for the current research

The foundation of life experience and interest gained through working as an educational psychologist has provided a resource for learning (Merriam & Caffarella, 1999) and maintained motivation and interest in issues around the support for pupils with ASD in schools.

Knowles, Swanson and Holton (2005) identified a number of andragogical or adult learning principles: adults are self-directed, autonomous, and free to direct their own focus for learning. Facilitators can guide them to their own knowledge. Opportunities that are goal-oriented, relevancy-oriented and practical are identified as motivating. A personal interest in further developing research skills and being able to apply these from an educational psychology perspective, in addition to increasing effectiveness in supervising research carried out by members of the team, is a motivating factor in carrying out this study. Additionally, the ability to spend time exploring an area of interest within the framework of psychological theory is valuable both for personal and professional development.

1.6. Summary

In this chapter an overview of the research, including the focus, rationale and area being examined has been provided. The distinctive contribution of the research has been considered, and its relevance for EP practice identified.

Chapter 2 - Literature Review

2.1. Introduction

In this chapter relevant theory and research in relation to the current study is reviewed. The focus of the review is upon the following:

- the concept – i.e. self-efficacy (SE)
- the research in relation to teaching assistant (TA) SE
- the research into the efficacy of TAs supporting ASD, using teacher research as a guide to possible factors at play.

2.2. Literature review strategy

A review of the literature was carried out in order to:

- To identify what was already known about the topic
- To identify research which might be similar or related to the proposed area of focus
- To identify any gaps within the research

Firstly, the role and deployment of TAs in school was examined within the context of an inclusive ideology in which pupils with additional needs are increasingly taught within the mainstream context. The needs and demands of pupils with ASD were then considered, providing specificity around the demands that TAs within the study are working. The concept of self-efficacy was examined in relation to its definition, limitations, and measurement, with the research around teacher self-efficacy providing a guide to the way in which TA self-efficacy might be further investigated. In this way, literature relevant to the 3 research questions was reviewed:

The final section highlights the research questions which inform the phases of the study.

2.3. Systematic search process

A systematic literature search was conducted. A systematic review enables synthesis of the research findings in order to seek evidence for "what works and what does not" (Petticrew & Roberts, 2006, p. 2). Gough (2007) suggests that a clear definition of the criteria for inclusion of research studies enables the researcher to systematically appraise the evidence and examine the way in which the findings provide evidence for the research question posed. Inclusion and exclusion criteria were therefore identified (see 2.3.2.).

2.3.1. Objective.

The objective of this systematic review was to assess research carried out in relation to the self-efficacy (SE) of teaching assistants (TAs) supporting children with autism (ASD) in mainstream primary schools.

2.3.2. Criteria for selecting studies.

A method described by Torgerson *(*2003) was initially employed in examining the extant literature. This recommended that key terms be combined for each relevant search. The focus of the research was upon SE of TAs in relation to supporting primary aged children with ASD. Thus the following terms were initially combined to include all possibilities:

- teaching assistants
- autism
- Self-efficacy

A thorough and systematic search of a number of electronic databases was made, primarily focusing upon the most relevant psychology and education

databases, namely, PsycINFO (1985-present), Sciencedirect, ERIC, British Education Index, PubMed and Web of Science using the library catalogue and the electronic journal resource at Cardiff University ending in May 2016. The following exclusion criteria were implemented:

- Refine a search which returned 400+ references since the search was determined to be too broad.
- Discard all search items that did not relate to children or schools
- Discard all items that did not reference any of the project aims within the abstract.
- Include peer reviewed articles.

Despite this approach, the searches produced irrelevant material in addition to missing studies of possible interest, therefore the search was amended as below:

- A range of terms were used to cover the TA role. These included: learning support assistant, paraprofessional, teacher aide and classroom assistant.
- Additional broader searches were carried out via Google, including Department for Education publications (DfE), specific Local Authority (LA) information and so on, in order to gain a wider perspective.
- Hand searching of relevant journals was carried out. These included Good Autism Practice, Educational Psychology in Practice, Support for Learning, and Educational and Child Psychology.

For practical reasons, all studies had to have been translated into English.

The literature in relation to TA SE was sparse and therefore the search was widened to include teacher SE and parent SE both within the UK and international contexts. Additionally, theses examining self-efficacy, autism or teaching assistants were accessed since such unpublished works were able to offer some researched conributions within the area of focus. Studies which involved measurement of self-efficacy within primary, secondary, further and

higher education settings were included in the study, again due to the paucity of available data. Since the thesis is primarily concerned with an examination of SE of TAs in relation to supporting pupils with ASD, studies examining other areas of specific pupil need were not considered.

Where theoretical literature in psychology and education were being examined, a less systematic strategy was utilised.

2.4. The role and deployment of TAs in schools

2.4.1. Aim of the section.

This study aimed to examine the constructs which TAs report in relation to their performance of their role in supporting pupils with ASD in primary schools. It was deemed appropriate to provide the context for this exploration via consideration of the background and rationale for the rise in the use of TA support within schools, the role of TAs in schools and key research into the effectiveness of TAs in schools.

2.4.2. The rise of TA numbers in schools.

As indicated above, individual schools, local authorities and researchers have preferred different terms in relation to the classroom support role, with Rhodes (2006) describing the use of the terms “classroom assistants”, “learning support assistants” and “teaching assistants” within the UK context. Farrell, Balshaw and Polat (2000) explained that there is no clear distinction between the roles of teaching assistant (TA), classroom assistant, learning support assistant (LSA). Since Hammett and Burton (2005) stated that “teaching assistant” was the preferred term used by the Government, this term will be used throughout this study.

The number of TAs working in schools has shown a significant increase within the last 15 years. In 1997, there were 61,000 TAs in English primary and secondary schools. By 2005 this rose to 148,500 (DfES, 2005), and by January 2009, the number of support staff in mainstream nursery, primary and secondary provision had reached 303,700 (DCSF, 2009). The 2014 school workforce census showed that there were 255,100 full-time equivalent TAs, representing an increase of 4.8 per cent on 2013.

The reason for the increase in numbers of TAs within schools has been discussed by a range of commentators. It has been attributed by some to the inclusive schools movement (Farrell et al*.,* 2000; Moran & Abbott, 2002; Groom & Rose, 2005) whereby the move towards inclusion of children with special needs within mainstream education following the 1981 Education Act (DES, 1981) led to an increased requirement for support within the classroom. Others have suggested that the Workforce Remodelling Movement was the catalyst for change (Butt & Lance, 2005; Brookson, 2006; Rhodes, 2006), with difficulties in recruiting and retaining staff leading to an increase in support roles to help to manage teacher workload.

2.4.3. The role of TAs in schools.

The use of additional untrained staff within the school context is often ill-defined and ambiguous (Rose & Coles, 2002), and the perceived functions of the TA role and the range of tasks carried out by such staff in school varies widely between schools, counties and countries (Rose & O'Neill, 2009). The breadth of activities required of support staff for children with additional needs has been proposed to fall into the areas of physical, learning and social skills (Foreman, Bourke & Mishra, 2001). In practice, TAs have been utilised within behaviour teams and across Child and Adolescent Mental Health Services (CAMHS) (Groom, 2006); as enablers for the multiply disabled (Takala, 2007); as targets for attachment behaviours in young people (De Schipper & Schuengel, 2010); as facilitators for children with behavioural needs being reintegrated into school (Groom, 2006); and in

supporting pupils' emotional literacy skills (Grahamslaw, 2010). Targeted programmes such as the EarlyBird Plus (EB+) and Cygnets programmes for parents of pupils with ASD, actively promote TA participation within the weekly sessions.

Minodo, Mayer and Xin (2001) proposed five major components of the TA role in supporting inclusive education, namely: instruction; school support; liaison; personal support and one-to-one support. Despite widespread and varied use of TAs, Wilson, Schlapp and Davidson (2003) found that many TAs had no job description. This is unfortunate, since having a clear understanding by individuals of one's own role, and of the roles of others, is important in enabling individuals to contribute appropriately within an organisation (Rayner & Gunter, 2005).

Over time the increasingly professional role of the TA, and the need for continuing professional development was recognised (DfES, 2005). In collaboration with teaching unions, the publication *Raising Standards and Tackling Workload: A National Agreement* (DfES, 2003), aimed to address workload issues for teachers as well as to raise pupil achievement and well-being via a new role - the Higher Level Teaching Assistant (HLTA) (DfES/TTA, 2005). A wider range of responsibilities was assigned, with a shift from individual support of pupils to group work and whole class tasks (Burgess & Mayes, 2009).

Groom (2006) observed that as TA numbers increased, the role developed, with a move from general teacher assistance to a more specific focus upon the process of teaching and learning. Even before workforce remodelling, Moyles and Suschitzky (1997) had identified a shift from an ancillary role towards a role which focused more closely upon teaching.

It might be argued that the TA profile and status was raised by the Higher Level Teaching Assistant (HLTA) award, however, caution has been expressed with regard to the breadth of responsibilities some staff now hold,

with no apparent limit to the duration and frequency of some activities, such as covering whole class lessons (Graves, 2011). It has been contended that the creation of the HLTA qualification resulted in a hybrid role which sat between TA and teacher (Graves, 2011).

In 2005, Kerry asserted that only a handful of researchers had looked into the role and efficacy of TAs. In the same year, Butt and Lance (2005) argued that “this under-researched group of staff should be considered of particular interest, not only in the context of remodelling, but also because of the increasing numbers of workers employed in such roles” (Butt & Lance, 2005. p. 141).

2.4.4. TA job satisfaction, stress and motivation.

Butt and Lance (2005) examined questionnaire and interview data from 32 schools in relation to TA job satisfaction. TAs surveyed were broadly satisfied with the role (65%), well-motivated, and positive about their management. Dissatisfaction related to factors including conditions of service, temporary contracts, rates of pay and lack of training. In addition, lack of preparedness for the task in hand and issues of disorganisation have been put forward as reasons for low satisfaction within the role. (Farrell et al*.,* 2000; Russell, Blatchford, Bassett, Brown et al. 2005).

Hammett and Burton (2005) found that 73% of TAs were motivated by the availability of a job description. Career progression and training were additionally seen as motivating factors. Half of the TAs surveyed perceived a specialist role as motivating, however a quarter of staff perceived this as being potentially stressful. This study was conducted within one setting thus generalisability might be limited, however, the conclusions are worth consideration: schools were recommended to focus upon activities which would develop TA self-esteem and status, and further research into the factors such as SE, which affects motivation, was indicated.

2.4.5. The impact and effectiveness of TAs in schools.

Continuing focus upon the inclusive classroom and the requirement to support a diverse pupil population placed increased demands upon teachers and led to concomitant demands for increased TA staff support within the classroom (Forlin, Keen & Barrett, 2008). By providing in-class support for children with additional needs, TAs have been perceived to play the single most important role in enabling the inclusion of pupils with additional needs into mainstream classrooms (Clark, Dyson, Millward & Robson, 1999).

In 2006, Groom assessed the growing role of TAs in schools, noting a burgeoning area of research examining questions around TA role, efficacy and training. TA contribution to teaching and learning has been recognised by a number of researchers (Alborz, Pearson, Farrell & Howes, 2009; Blatchford et al. 2009; Farrell, Kaplan & Moss, 2003; Lacey, 2001): Brown and Harris (2009) suggested that their data demonstrated that there was an association between the presence of a TA and increased GCSE (General Certificate of Secondary Education) results; Cremin, Thomas and Vincett (2005) highlight the link between TA deployment and improvements in teaching and learning, and Black-Hawkins, Florian and Rouse (2007) assessed their role in raising attainment.

Presence of TA staff has been associated with positive secondary outcomes for pupils: Lacey, (2001) suggested that TA presence can support inclusion; Blatchford et al. (2004), found that TAs had an indirect impact upon pupils, for example, pupils received more individualised attention, and engaged in a more active form of interaction with the teacher; Blatchford, Bassett and Brown (2005) demonstrated that on-task behaviour can be improved by TA presence, and Gunter, Rayner, Thomas, Fielding et al. (2005) reported that the availability of TA support means that administrative tasks are reduced for teaching staff.

In order to gain a pupil perspective around TA role and deployment, children's views of their TAs were gathered by Fraser and Meadows (2008). Pupils agreed that TAs were useful and helpful, and were important members of the school community. Pupils were able to distinguish between the TA and teacher role, indicating that the shift towards a more pedagogical role (Burgess & Mayes, 2009) might not have eclipsed the gap in professional roles.

Despite the above, an increasing body of evidence appears to throw doubt upon the positive impact of TAs within the classroom, and their role in supporting inclusive practice. Indeed, Giangreco and Doyle (2007) contended that the literature is "devoid of convincing arguments that it is educationally sound to deploy the least qualified personnel to provide primary instruction to students with the most complex needs" (p.432).

Alborz et al. (2009) carried out a systematic review of the impact of trained support staff on the participation and learning of children in mainstream schools. They suggested that TAs can help children with emotional development and with language and literacy skills with training and support to deliver specific interventions. Thus, preparedness of TAs appeared to be an important factor.

Blatchford et al. (2009) carried out a 5 year longitudinal study across primary, secondary and special schools (Deployment and Impact of Support Staff, DISS) researching deployment of support staff and impact on outcomes. A consistent negative relationship was found between the amount of support received and pupil progress in literacy and mathematics at both Wave 1 and Wave 2. The Primary National Strategy (2006) defines Wave 1 as "Quality first teaching for all" (p.1). In relation to behavioural needs, it further identifies a high quality approach which will teach social, emotional and behaviour skills to all children, including effective whole-school or whole-setting policies and frameworks for promoting emotional health and well-being". Wave 2 is expressed as comprising: "Additional interventions to enable children to work

at age-related expectations or above" for their learning, and as including; "small-group intervention for children who need additional help in developing skills, and for their families" (p.2), when behavioural needs are identified as a focus of concern. Within the Blatchford et al. (2009) study, pupils with SEN were routinely taught by TAs rather than teachers, thus support staff provided alternative rather than additional support to pupils with additional needs. Statistical analysis of the data controlled for factors such as prior attainment, SEN, status, gender, deprivation, thereby removing these as contributory factors. It was concluded that the more support a pupil received, the less progress they made. However, this research did not test individual differences between TAs (e.g., experience and qualifications), and pupil outcomes.

The Effective Deployment of Teaching Assistants (EDTA) project, (Blatchford, Russell & Webster, 2012) sought to address the issues identified within the DISS project, identifying that findings could be related to issues associated with deployment, practice and preparedness of TAs. The project developed alternative ways of using TAs which clarified both TA and teacher role in working with children with SEN. Such changes were seen to provide significant benefits to both staff and pupils.

The Making a Statement (MAST) study carried out by Webster and Blatchford (2013), sought to explore the teaching, support and interactions that took place for 48 Year 5 pupils with statements of SEN attending mainstream primary schools. These pupils had statements for moderate learning difficulties, or behavioural, emotional and social difficulties. The cohort did not include pupils with a statement for a primary need of ASD, however, it is felt that these findings are relevant to consider for the current study. Systematic observations made at one minute intervals throughout the week, in addition to control pupil observations and detailed case studies compiled via interviews with 200 school staff and parents, provided qualitative and quantitative data. Analysis provided 5 key findings:

- In comparison to the control group of average attaining peers, the statemented pupils were more than 3 times as likely to interact with TAs than teachers, with one-to one interaction with the TA being at the expense of interaction with both teacher and peers.
- TAs had the main responsibility for teaching the statemented pupils. They planned and implemented programmes and had a high level of responsibility for differentiating activities, often with no prior preparation.
- The children with statements received what was described as a lower quality pedagogical diet than the average attaining control group, since teachers typically had low levels of involvement in the planning for, and teaching of these pupils.
- Despite TAs having similar weaknesses in knowledge and training to teachers, the TAs were positioned by teachers as experts on the statemented child. Teacher confidence was therefore a factor in maintaining the model described.
- Little evidence of effective theoretically grounded pedagogy around the practice observed was identified.

A further paper presented by Webster and Blatchford (2015), built upon the descriptive findings of this study by carrying out semi-structured interviews with SENCos, teachers, TAs and parents/carers to examine the structure, delivery and effectiveness of provision. Teachers again positioned the TA as the ‘expert’ on the statemented pupil despite their limited and generalised training in SEN, and curriculum interventions (Webster & Blatchford, 2015). This appeared to legitimise teachers’ devolution of pedagogical responsibility for the education of these pupils. An organisational reliance upon TAs to be the means by which inclusion was managed was discovered, reflecting Sikes, Lawson and Parker’s (2007) contention that inclusion was seen as specifically contingent upon available resources as opposed to educational principles. Considerable gaps in teacher and TA knowledge in regard to meeting the needs of pupils with statements was identified in the sample of 162 school staff in the study. Over a third of all TAs and teachers reported

that they had received no specific training to meet the SEN of the pupil they were supporting.

Others have also argued that TAs can act as an obstacle between pupils and peers (Farrell, Balshaw & Polat, 2000; Groom, 2006). Ainscow (2000) suggested that without skilled management and deployment of TA staff one to one support may actually create a barrier between classmates and the young person. As such, it functions as an anti-inclusion measure. Having more adults within the classroom has not shown to increase the time that the teacher spends with children, but can result in the teacher spending less time with pupils (Thomas, 1992; Cremin et al., 2005). It may be that this time is being well spent on other activities which have a positive impact upon learning, and this fact is not assessed within the research.

Despite such research findings, parents perceive TA support as a desired outcome from the statementing - now EHC plan - process, and it appears that a high level of TA support is seen as a prerequisite for inclusive education (Webster, 2014).

Despite its length and complexity, the SEND code of practice (2014) has fewer than a dozen references to TAs, classroom assistants and learning support staff. The emphasis appears to have shifted towards teacher responsibility for high quality teaching of all children and accountability for "the progress and development of the pupils in their class, including where pupils access support from teaching assistants or specialist staff" (Dfe/DOH, 2014 p. 86). However, the SEN landscape will need to undergo a sea-change if the issues identified above are to be effectively tackled within schools. A key consideration currently might therefore be further exploration of the ways in which TAs can be a part of creating successful outcomes for children with additional needs.

2.4.6. Teaching Assistant training.

A key factor relating to the effectiveness of the current model of SEN provision, which is heavily reliant on direct pupil support from TAs, would seem to be the quality of training and level of knowledge they possess. As identified above, there are clear concerns about the discrepancy between the nature of the TA role and the level of training they receive to support their practice (Moran & Abbot, 2002; Mistry, Burton & Brundrett, 2004; Teeman, Mundy, Walker, Scott et al., 2009; Farrell et al., 2010; Blatchford et al., 2012).

At least 59% of TAs enter the role with qualifications at GCSE level or below (Blatchford et al., 2012). The majority of TAs do engage in training, however, this is not always part of a planned programme and does not necessarily lead to qualifications (Russell et al., 2005). Dew-Hughes, Brayton and Blandford (1998) researched the professional development of 274 TAs from 62 local authorities via questionnaire - unsurprisingly perhaps, TAs welcomed any opportunities which increased their effectiveness in carrying out their jobs. Farrell et al. (2000) examined the management, training and role of Learning Support Assistants (LSAs) in England. Again, LSAs were seen to value training, particularly if related to their daily work activities. These findings reflect the relevancy-oriented principles of adult learning identified by Knowles et al. (2005).

Rose and Forlin (2010) evaluated the efficacy of training for TAs, with a focus on supporting and fostering inclusive practices in schools. The training was deemed successful in increasing personal confidence and self-esteem, however, lack of clarity around their role and a narrow expectation of their deployment in schools limited their effective use.

Butt and Lowe (2012) examined the effect of TA training on ability to support both the teacher and the student. Results indicated that specifically targeted

skills-based training benefited the TAs and the TAs perceived that this benefit impacted upon both teachers and pupils. Skills training would appear to rely upon a clear understanding of the TA role being identified and agreed within settings.

Rispoli, Neely, Lang and Ganz (2011) summarised 12 studies in which paraprofessionals were trained to implement interventions for individuals with ASD in an attempt to identify the most promising approaches. A range of interventions such as social stories, prompting and reinforcement, and use of schedules, were taught in an attempt to target behaviours including reduction in challenging behavior, increase in time on task and improving expressive language skills. The authors suggested that training protocols which comprised written and verbal explanations, modeling, video demonstration, role play or feedback might improve accuracy of intervention implementation, however, given that a range of approaches were often used concurrently it was not possible to clearly anlyse individual components of training which might be most beneficial. Again, approaches based upon teaching specific interventions are dependent upon the setting being clear about the key tasks to be completed by the TA.

Given this context, it seems unfortunate that the development of professional standards for teaching assistants announced by the DFE (2014) has not been forthcoming: “the government believes that schools are best placed to decide how they use and deploy TAs, and to set standards for the TAs they employ. The secretary of state has therefore decided not to publish the draft standards.” (*http://schoolsweek.co.uk/the-report-that-nicky-morgan-doesnt-want-you-to-see-teaching-assistant-standards-dfe-report/*)

2.5. Supporting pupils with ASD in schools

2.5.1. Aim of the section.

In order to contextualise, and further explore the role of the TA in supporting pupils with ASD, this section will consider the pupil population supported by the TAs taking part in the study. Diagnosis and prevalence of ASD is explored, followed by an outline of the characteristics, outcomes, key issues for inclusion, and consideration of the challenges to teaching and supporting pupils with ASD in the classroom.

2.5.2. The diagnosis of ASD.

Kanner (cited in Kanner, 1973) first described “classic autism”. This was thought to be a rare condition with youngsters being socially aloof, indifferent to others, and engaged in stereotypical and repetitive activities. The autistic child experienced significant challenges and might also have intellectual disabilities.

Asperger (cited in Frith, 1991) described a group of children who exhibited repetitive interests, interpreted language literally, were pedantic, socially awkward, and demonstrated a lack of empathy. They had difficulties in social communication, but normally developing language skills. This group were described as having “higher level” skills within the autistic continuum.

A triad of impairments was identified (Wing & Gould, 1979), characterised by difficulties with:

- social interaction and social relationships;
- social communication and language;
- social understanding, social imagination and ‘Theory of Mind’, as cited in Wing (1993).

There is no medical test to diagnose autism. Within the UK, the National Autism Plan for Children (NAPC, 2003) explains that a diagnosis of ASD requires multidisciplinary assessment, which should include educational reports, developmental history, observations, and physical examination.

Diagnosticians use a range of methods to diagnose ASD, but the NICE Clinical Guideline 128 (England, Wales and Northern Ireland) or SIGN Clinical Guideline 98 (Scotland) should be followed.

The importance or otherwise of a diagnosis of autism has been questioned within the literature (Hacking, 2009). Professor Rita Jordan (2015) has suggested that service provision should be based upon individual need, questioning a reliance upon behavioural symptoms in diagnosis, however, it is hard to see how a reliable system could be devised in the absence of such behavioural indicators (Hassall, 2015; Letters, The Psychologist, May 2015).

For the purposes of this research, the diagnosis of autism is accepted, and the cohort of participants will comprise TAs who support children with a diagnosis of ASD in primary schools.

2.5.3. Prevalence.

Within the United Kingdom it is estimated that more than 1 in 100 people have autism (Brugha, McManus, Meltzer, Smith et al., 2009). This statistic is still quoted as being accurate by the National Autistic Society (*http://www.autism.org.uk/About/What-is/Myths-facts-stats*). Increases in prevalence, due to factors such as better diagnostic measures, increased access to professionals and higher levels of awareness within the general population, mean that primary teachers are increasingly required to provide an “autism friendly” classroom environment and ensure that teaching practices support the inclusion and good progress of pupils with such a diagnosis.

236,805 pupils have a statement of SEN or EHC plan. (DfE, 2016). 25.9% of pupils with a statement or EHC plan have ASD as a primary type of need (DfE, 2016), thus ASD remains the most common primary type of need for pupils with a statement or EHC plan. Boys with a statement or EHC plan are more likely to have ASD as a primary need than girls (30% versus 14.8%). In

line with educational policy (Department for Education and Employment, 1997), there are increased numbers of children with ASD educated within mainstream settings within the UK.

2.5.4. The ASD profile of strengths and weaknesses.

The Autism Education Trust (2015) explains that the neurological differences in brain development in children with ASD mean that staff must understand and pay attention to individual needs, and provide different levels of support to enable children to: understand the social and emotional behaviour of staff and peers; understand and use communication and language; process information effectively, and manage the sensory demands of the environment.

Ozonoff (2012) describes the symptoms of ASD as sitting along a continuum from mild to severe. This means that despite the same label, individuals exhibit a unique profile of strengths and weaknesses changing across time and contexts, and require tailored approaches to support and intervention. Pupils with ASD often require some special arrangements to be made within their educational provision, dependent upon level of need. The graduated response to meeting need means that these pupils are increasingly supported within mainstream classrooms with the addition of SEN Support and individually targeted approaches. It would seem essential that these staff feel capable in what they do, in order to support such children effectively.

2.5.5. Supporting pupils with ASD in schools.

Children with ASD can challenge the skills of families and their schools. Within the school context they might exhibit: difficulty in developing and maintaining friendships; limited response to verbal praise; difficulties understanding the views of others, which makes it hard to work, learn or play as a member of a group; difficulty making sense of the social world; problems with less structured times of the school day, and difficulties with the

social use of language and the pragmatic aspects of communication (Hampshire County Council Children's Services Department SEN Service, November 2010).

Humphrey and Lewis (2008) contend that the inclusion of pupils with ASD is one of the most poorly understood and complex tasks in education, and more of a challenge than inclusion of pupils with other special educational needs (House of Commons Education and Skills Committee, 2006): "Schools need to buy in wholesale to inclusion if it is to work…without a shift in the whole organisation's attitude and approach it will fail children with autism and Asperger syndrome" (Barnard et al*.,* 2000, p.97). Collaboration and information-sharing amongst teachers, senior management (Huang & Wheeler, 2007), educational professionals (Simpson, de Boer-Ott & Smith-Myles, 2003), support staff (Abbott, 2007) and parents (Leach and Duffy, 2009) are all seen as crucial to success.

Again, training is viewed as key if schools are to meet the needs of children with ASD (Jordan & Jones, 1997), however, Dybvik (2004) contended that there is inadequate training available. Although benefits of training have been clearly identified in relation to building confidence (Glashan, Mackay & Grieve, 2004), reducing dependency upon TAs (Emam & Farrell, 2009), and pro-inclusion attitudes (Horrocks, White & Roberts, 2008), training for teachers and TAs alike appears to be ad hoc and not a prerequisite for supporting a child with ASD. Although the SENCo and class teacher are responsible for the daily planning, monitoring and reviewing of children with additional needs, in practice it is often left to the TA to differentiate activities, utilise strategies and support behavioural needs (Blatchford et al*.,* 2012).

2.6. Self-efficacy

2.6.1. Aim of the section.

The key aim of this-study is to examine three key questions which relate to: the concept of self-efficacy; its measurement in TAs in primary schools, and perceptions of SE in relation to the specific task, ie, TAs supporting pupils with ASD. Accordingly, this section will consider concepts of SE; examine where our SE beliefs come from; consider research on teacher SE beliefs; teacher SE and training; teacher SE in relation to special education/autism; parental SE; measuring SE in relation to ASD, and limitations of the Bandura (1977) theory of SE.

2.6.2. Concepts of self-efficacy.

Rotter's locus of control theory (1966) was the basis for the earliest research in SE. This stated that individuals could be divided into those who attributed outcomes to internal causes (such as ability) versus those who attributed to external causes (such as luck). Levels of SE would thus be determined by internal versus external explanations for outcomes.

A second strand of research in efficacy was grounded in Bandura's (1977) Social Cognitive Theory. Within this theory, an individual's actions and reactions, including social processes and cognitive processes, are influenced by observation of the actions by others.

Social Cognitive Theory (Bandura, 1986) assumes that all individuals are capable of intentional pursuit of courses of action. Such agency exists within a process Bandura (1997) refers to as "triadic reciprocal causation" (Bandura, 1989 p.1175). Internal personal factors comprising cognitive, affective and biological states interrelate with environmental influences and our behaviour. These interrelationships impact upon the individual and determine our beliefs, the choices we make and the actions we take.

The theory comprises of a core set of determinants: knowledge and behavioural capacity; observational learning; reinforcements and perceived barriers; outcome expectations; goals; and SE (Bandura, 2004). It proposes

that an individual's knowledge influences ability to perform a behaviour. Through observational learning the modelling of alternative behaviours is witnessed and these can be learned and repeated (Bandura, 2001).

The concept of self-efficacy (SE) is central to Bandura's theory. Bandura (2001) considers SE beliefs to occupy a central role since they impact upon the behaviour and environmental determinants. In his seminal paper, Bandura (1977) defined SE as "the beliefs in one's capabilities to organise and execute the courses of action required to produce given attainments" (p.3). This can be seen as the belief in one's ability to succeed within a specific situation.

According to Bandura's theory, people who believe they can perform well - ie, who have high SE - are more likely to view challenging tasks as something to be mastered as opposed to being avoided. Thus by determining the beliefs an individual holds with regard to their power to influence situations, SE influences the choices people are likely to make. This proposition has been supported within the research literature, with SE being linked to a variety of clinical issues such as phobias (Bandura, 1983), addiction (Marlatt, Baer, & Quigley, 1995), depression (Davis & Yates, 1982), and smoking behaviour (Garcia, Schmitz, & Doerfler, 1990). Within the field of education, SE beliefs are related to academic performance and self-regulated learning (Hackett & Betz, 1995; Pajares, 1996; Schunk, 1991; Zimmerman, 1995).

Efficacy beliefs influence motivation (Pintrich & Schunk, 1996). Bandura postulated that: "People regulate their level and distribution of effort in accordance with the effects they expect their actions to have. As a result, their behaviour is better predicted from their beliefs than from the actual consequences of their actions" (1986, p. 129). Thus SE influences choices, effort, persistence in adversity and our emotions (Pajares, 1997).

Most SE theories based upon Bandura's conceptualisation tend to refer to *efficacy expectancy,* which is the belief in one's capacity to perform behaviours and to *outcome expectations,* which refers to the belief that if effort is expended, an outcome will be achieved (Gibson & Dembo, 1984. Tobin, Muller & Turner, 2006). Locus of control (Rotter, 1966) can be seen as a type of outcome expectancy, and is generalised in relation to behaviours and outcomes. SE, in contrast, is situation and task-specific (Bandura, 1986). It can only be determined in relation to a specific task (Goddard, Hoy & Woolfolk Hoy, 2004) and thus does not relate to individual traits (Maddux, 1999). It is a judgement of personal capability (Bandura, 1997), and is an active and learned set of beliefs linked to context. Goddard et al. (2004) exemplified the concept: an individual can experience a low sense of SE for a task, but no decrease in self-esteem is experienced if the individual has not invested self-worth in doing well in the activity. However, a high achieving individual may evaluate their performance negatively despite high skill levels if they have set high personal standards that are difficult to meet.

2.6.3. Where do our self-efficacy beliefs come from?

Bandura (1986) argued that: "perceived SE results from diverse sources of information conveyed vicariously and through social evaluation, as well as through direct experience" (p. 411). Further, these sources of information "must be processed and weighed through self-referent thought" (p. 21). Four main *sources of information* for SE beliefs are postulated by Bandura (1997): mastery experiences; vicarious experiences; verbal or social persuasion; physiological and affective states. In addition, they are developed through four modes of induction.

Table 1: Sources of information and Modes of induction (Bandura, 1997).

Source of information	Mode of induction
Enactive mastery experiences/ performance accomplishment - successful first-hand experience of the task	1. Participant modelling 2. Performance desensitisation 3. Performance exposure 4. Self-instructed performance
Vicarious experiences - watching someone else be successful with the task	1. Live-modelling 2. Symbolic modelling
Verbal persuasion - being verbally persuaded by another to do (that they can do) the task	1. Suggestion 2. Exhortation 3. Self-instruction 4. Interpretative treatments
Physiological and affective states - emotional feelings about the task.	1. Attribution 2. Relaxation, biofeedback 3. Symbolic desensitisation 4. Symbolic exposure

The interpretations that individuals make in relation to past performance are described as *enactive mastery experience.* Interpretations of past performance were hypothesised by Bandura (1997) to robustly indicate an individual's SE. This was confirmed in relation to a student population by Usher and Pajares (2008). The perception that one has performed successfully, raises efficacy beliefs and supports the expectation of proficient future performance (Woolfolk Hoy, 2000). Efficacy beliefs can be lowered when an individual perceives that their performance has been poor, when this cannot be attributed to external events or a lack of effort. In turn, this leads to the belief that future performances will also be poor (Tschannen-Moran & McMaster, 2009). For example, It is suggested that a teacher who has enabled pupils to make good progress will favourably interpret their effort in doing so, and thus increase their SE. However, where pupils make little progress, the teacher's beliefs in their skill level can be lowered. The same model would hold true with TA staff who have to meet a range of expectations in schools.

Vicarious experience refers to the experience an individual gains by observing success or otherwise in others. TAs may refer to the performance

of others as a way of evaluating their own capabilities. Tschannen-Moran and McMaster (2009) contend that the extent to which an observer identifies with an individual who is modelling a skill determines the level of impact upon efficacy.

Verbal or social persuasion refers to persuasive messages that individuals receive from others. Such messages can strengthen efficacy beliefs (Bandura, 1997). Persuasion in the form of performance feedback from others can boost SE and lead to an individual initiating a task, trying new strategies or trying hard to succeed. Positive messages can boost SE, however, criticism can be undermining. Teachers perceiving a high level of support from senior management, report themselves to be less stressed, and more committed and satisfied in their jobs (Billingsley & Cross, 1992).

Physiological and affective states refers to the affective responses in relation to performance. If energised by a task, activities will be approached with confidence. However, stress and anxiety can undermine the individual's ability to feel that they are carrying out an activity effectively.

Perceived SE is domain specific and situation specific, therefore can change over time and across contexts. In addition it can change across the dimensions of strength, generality and magnitude (Bandura, 1977):

- Strength - the degree to which the individual believes they can do the task;
- Generality - the degree to which efficacy beliefs about a task might generalise across a range of similar activities;
- Magnitude - amount of effort put into the task.

Goddard and Goddard (2001) highlight two types of efficacy - individual and collective. The latter explores social cognitive theory at the group level in order to explain how collective efficacy is formed, and its impact within the educational context.

This research study will focus upon individual efficacy beliefs.

2.6.4. Limitations of self-efficacy theory.

Centrally, SE theory is concerned with the interaction between an individual's perceptions and the environment (Luszczynska, Gutiérrez Doña, & Schwartz, 2005). The theory is thus helpful in supporting thinking in relation to individuals' motivation and confidence to engage with, and to complete particular tasks. Reeve (2012) asserts that enhancing SE is the foundation of personal empowerment. When feeling empowered, individuals are able to translate knowledge and skills into successful performance despite threats or the intrusion of negative thoughts.

However, other theories of motivation exist. Reeve (2012) contended that there are *grand* theories which attempt to explain all aspects of motivation, and *minitheories* which explain limited aspects, postulating that SE is just one of twenty four mini theories which aim to explain achievement motivation, thus at least 23 theories compete with this as an explanation for behaviours.

Two of the competing theories have been examined by Pintrich (2000), who suggested similarities between Vroom's 1964 Expectancy x Value Theory (cited in Mitchell, 1974), and that of Bandura. Vroom asserted that there are four types of values which influence people: attainment; instinct; utility and cost. People are motivated when they expect to gain any of these values. Another perspective is offered by Locke's (1968) Goal Orientation theory, which suggests that individuals are motivated by personal development or by competition with others, describing these as *mastery* and *performance goals* (Pintrich, 2000).

Shapiro, Schwartz and Astin *(*1996) questioned whether or not developing SE was a valuable endeavour. They suggested that it can be adaptive to develop SE when environments are controllable, however, when the

environment cannot be controlled, promoting SE can result in maladaptive behaviours and helplessness. Carlson, Buskis and Martin (2000) contended that the importance of personality traits was played down within SE theory, with a focus upon the environment taking priority. It was proposed that models of motivation should place equal emphasis upon early developmental history, personal and biological traits, and the environment.

Despite critiques, Schwartzer and Hallum (2008), assert that there is much supporting evidence for the concept of SE, describing it as the most researched of all self-regulatory mechanisms.

2.6.5. Measuring self-efficacy.

Conceptualisations of the construct of SE have informed the way in which it is measured. Over the last 30 years, a wealth of research on the definition and measurement of SE, and particularly teacher SE, has been carried out. Despite the range of instruments constructed, “teacher efficacy remains a conceptually elusive construct, [which is] difficult to assess with certainty” (Hebert, Lee, & Williamson, as cited in Wheatley, 2005, p. 749). It is noted that despite teacher efficacy being viewed as a continuous variable, research rarely focuses upon specific efficacy beliefs, and provides the example “I can teach fractions effectively” (p.749). Assessment of TA SE, particularly in relation to the UK definition and understanding of the role, has been minimal. There therefore appears to be a gap within the published research in this area.

2.6.6. Teacher self-efficacy.

In Hammett and Burton’s (2005) review of TA stress and motivation, empirical evidence and theories which related to teachers rather than TAs were reviewed. This was justified by both the lack of research into TAs, and the stated blurring between teacher and TA roles. Because of the paucity of research into TA SE, within the present study the researcher contends that it

is helpful to examine the evidence around teacher SE, and the theories which relate this research to the role of the teacher (Hammett & Burton, 2005).

Within teaching, SE refers to beliefs in one's capability to achieve successful outcomes for pupils (Gibson & Dembo, 1984) and represents beliefs about the teacher's ability to carry out tasks, such as to deliver the lesson content effectively, manage the classroom environment and successfully engage pupils. Tobin, Muller and Turner (2006) define SE in this domain as, "the extent to which teachers believe their efforts will have a positive effect on their students' abilities, in redirecting their students' behaviour and on their overall student achievement" (p. 303).

There has been much attention to the concept of teacher efficacy within the psychological literature. Tschannen-Moran, Woolfolk-Hoy & Hoy (1998) reviewed the literature, identifying over 100 articles referring to teacher efficacy. Over time, the concept has been linked to a range of important variables including pupil self-esteem and prosocial attitudes (Borton, 1991), school effectiveness (Hoy & Woolfolk, 1993), the success of programme implementation (Guskey, 1998), student achievement and motivation (Moore & Esselman, 1992), teachers' professional commitment (Coladarci, 1992), and teacher stress and burnout (Brouwers & Tomic, 2000; Klassen & Chiu, 2010; Schwarzer & Hallum, 2008). This latter outcome might appear to be a key factor for TAs who are working within a demanding context, yet frequently do not have the necessary skills, support or training to be able to carry out the role effectively.

A range of factors has been noted to contribute to teacher SE. These include work with parents (Skaalvik & Skaalvik, 2010), and previous experience in working with children with special educational needs (Gibbs, 2007). Rubin, Fernandes and Avgerinous (2013) tentatively suggest that administrative support and personal accomplishment (see below) are also supportive factors.

Teacher SE has been related to positive classroom outcomes. Thus researchers have investigated the origins of SE beliefs in order to inform the development of SE during teacher training (Gaskill & Wollfolk-Hoy, 2002; Labone, 2004).

As outlined above, perceived SE is seen as being influenced by the exercise of choice, in either engaging or avoiding performance effort and intensity, and persistence. It is supported by performance accomplishments (what is achieved); vicarious learning (experience, apprenticeship); verbal persuasion and emotional arousal.

With a specific focus upon the task of teaching, Gibbs (2000) contends that there are at least four interacting aspects of SE that explain willingness and persistence in teaching in the face of identified external challenges:

- Behavioural SE: a belief in one's capability to perform specific actions in specific teaching situations;
- Cognitive SE: a belief in one's capability to exercise control over one's thinking in specific teaching situations;
- Emotional SE: a belief in one's capability to exercise control over one's emotions in specific teaching situations;
- Cultural SE: a belief in one's capability to perform specific actions in a culturally appropriate way.

Mirroring the Bandura model, Gibbs (2000) identifies influences upon teacher SE beliefs to be:

- performance accomplishments (experiencing success);
- vicarious experience (modelling the behaviour of significant others);
- verbal persuasion (being persuaded one has the capability to overcome specific difficulties);

- emotional and physiological arousal (emotions and moods affect SE judgments);
- imaginal-symbolisation (visualisation of performance in a specific situation);
- intention to act (I will versus the “I can” of SE).

Poulou and Norwich (2002) examined the link between attributions and SE, finding that teachers’ attributions predicted their emotional and cognitive responses to pupils who displayed challenging behaviour. In turn, this was predictive of the teachers’ intentional behaviour, which then predicted some aspects of the actual behaviour within the classroom (Poulou & Norwich, 2002).

On consulting the literature, it is clear that a range of constructions of SE have been employed, with semantic issues adding to the difficulty in determining what is being measured. Dellinger, Bobbet, Olivier and Ellett (2008) outline the way in which the constructs of teacher *efficacy* and teacher *SE* within the research have created some of this confusion.

Dellinger et al. (2008) suggest that teacher efficacy is defined as teachers’ beliefs in their abilities to affect student performance (e.g., Armor, Conroy-Oseguera, Cox, King, at al., 1976; McLaughlin & Berman, 1977; Gibson & Dembo, 1984; Tschannen Moran et al., 1998). They contend that the literature omits the crucial role that is played by teacher belief in their ability to perform tasks within *specific contexts*. Teacher SE beliefs are defined as beliefs about successfully performing specific teaching tasks within the specific context (school, classroom, students). Dellinger et al. (2008) sought to make clear the distinction between teacher efficacy and teacher SE beliefs. To meet this need, an American Teachers’ Efficacy Beliefs System-Self (TEBS-Self) measure was devised as a research based measure of teacher SE beliefs grounded within the classroom context.

In relation to supporting a pupil with ASD, SE refers to one’s capabilities to organise and execute the courses of action which produce achievement in

academic, social and emotional development for students with complex needs. In turn, pupils with additional needs will benefit from having access to staff with high levels of SE for supporting their needs. Such staff will benefit from higher levels of SE by experiencing increased levels of satisfaction within the role.

2.6.7. Teacher self-efficacy in relation to special education and ASD.

Tschannen-Moran and Woolfolk-Hoy (2001) suggest that a teacher SE belief is a judgement about their ability to affect outcomes for a child even when the child might be unmotivated or difficult. Teaching pupils with a diagnosis of ASD presents significant challenges (Jennett, Harris & Mesibov, 2003; Scheuermann, Webber, Boutot, & Goodwin, 2003) with the core needs of pupils with an ASD diagnosis impacting in all areas of learning (Rogers & Vismara, 2008; Emam & Farrell, 2008). The impact is particularly pronounced when pupils have significant emotional and behavioural, or learning needs (Hastings & Brown, 2002; Billingsley, Carlson & Klein, 2004).

Recent research indicates that there is increased stress on teachers of students with autism when compared with other groups of students with additional needs (Coman, Alessandri, Gutierrez, Novotny et al*.,* 2012; Jennett et al., 2003; Kokkinos & Davazoglou, 2009). Thus the complex demands of teaching a child with autism, which include impaired social and communication skills, rigid and inflexible thinking and patterns of behaviour that impact on learning and interaction, may lower a teachers SE for working effectively with such students (Ruble, Usher & McGrew, 2011).

Research into SE would therefore seem to be key for staff teaching children with special needs since this is a group of staff who have already been demonstrated to be prone to higher levels of stress and attrition (Emery & Vandenberg, 2010; Boyer & Gillespie, 2000; Awa, Plaumann, & Walter, 2010).

Despite this contention, there are a limited number of studies of SE that explicitly focus upon teachers of students with autism. In 2003, Jennett et al. investigated whether TES (Teacher Efficacy Scale) scores differed based on levels of commitment to one of two specific teaching philosophies associated with educating students with autism: Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH), or Applied Behaviour Analysis (ABA). Personal Efficacy scale scores correlated positively with commitment scores for both TEACCH (r = .47) and ABA (r = .38). General Efficacy scores correlated positively with commitment scores for ABA only (r = .53). No differences in SE scores based on teachers' self-identified philosophical orientation (TEACCH vs. ABA) were identified. A significant relationship between commitment to one's teaching approach and certain dimensions of teaching efficacy and burnout was found. Implications identified by the researchers included the need for adequate training of teachers of students with autism.

Klassen, Tze, Betts and Gordon (2011) reviewed teacher SE research between 1998 and 2009. They suggested a lack of sensitivity in SE measures in detecting the relationship between SE and task-specific skills that are carried out within the classroom. Neither the TES or the TISES (The Teacher Interpersonal SE Scale, Brouwers & Tomic, 2001) were seen to assess teacher ability to carry out the specific skills that are required in teaching students with autism. However, since this time, further studies have emerged.

In 2010, Ruble, Dalrymple and McGrew carried out a study focusing upon the task of teaching students with autism. The researchers hypothesised that: a sense of mastery, indicated by number of years' experience in teaching, would correlate positively with SE; that social persuasions, measured by perceived support from the principal, would correlate positively with SE, and that affective sources, as indicated by self-reported measures of burnout, would be negatively associated with SE. Based on a sample of 35 teachers, and utilising the Teacher Interpersonal SE Scale (TISES;

Brouwers & Tomic, 2001), in conjunction with The Multifactor Leadership Questionnaire (MLQ; Avolio, Bass & Jung, 1999), and The Maslach Burnout Inventory (MBI; Maslach, Jackson & Leiter, 1997), a number of findings emerged.

Firstly, no support was found for the association between years of teacher experience and SE. Thus in judging their teaching capabilities, teachers of students with autism did not seem to rely upon amount of prior experience gained. It was suggested that the heterogeneity of needs presented by the student population meant that generalisation from one pupil to another was limited and that a personalised approach was required. Additionally the researchers suggested that the gap between research being carried out, and findings being implemented in practice, led to a lack of evidence-based practice taking place in schools and strategies implemented lacking a scientific foundation.

The effectiveness of teacher training in autism was questioned given the lack of association between mastery experiences and SE. The researchers further hypothesised that those who teach students with autism might need access to specific methods of instruction, facilitating adoption of a teaching philosophy and thus promoting higher levels of SE.

Support was found for the hypothesis that physiological and affective states were associated with SE. Since this study was correlational in nature, directionality cannot be assumed. Increased levels of burnout could be experienced because of weak skills, or a feeling of having weak skills could have led to higher levels of burnout. Burnout appeared to be most closely related to the demands of the classroom and teachers' beliefs in their ability to handle these demands. Protective factors were hypothesised in relation to administrator support and personal accomplishment and these areas might be a valuable focus for future research.

In this study, the measure of mastery experience did not entirely represent the differences in training that teachers had received, or the different settings in which they had worked. For some aspects of the study, the sample size was limited (*n*=24) and data was incomplete, leading to low power. Researchers were unable to find a suitable measure of vicarious experience, and therefore suggested a focus upon this theorised source of SE within future research.

Ruble et al. (2010) suggested that the use of a SE measure more clearly focused upon the skills and tasks demanded of a teacher of children with ASD might produce results which differed from more generalised measures. Additionally, the use of a measure which explicitly examined the four sources of SE (Bandura, 1997) would enable the whole range of hypothesised sources to be assessed. Subsequently, Ruble, Usher & McGrew (2011) evaluated the SE of 35 teachers of pupils with ASD using a scale which measured three out of four of Bandura's sources of SE. Again, limitations of the measure used were suggested, with the TISES inadequately representing the key tasks for teachers of children with ASD.

Based upon these findings, Ruble et al. (2013) sought to create a specific and more sensitive measure called the Autism Self Efficacy Scale for Teachers (ASSET). The ASSET is a 30-item measure developed to assess the beliefs of teachers in special education in their ability to carry out the professional tasks associated with teaching pupils with autism. Items selected for use within the scale were based upon a self-report questionnaire which assessed the content and skill knowledge required by a teacher of children with ASD, as defined by autism trainers and best practice documents in the United States (National Research Council, 2001). This included such descriptors as: "Describe the implications for intervention based on this student's characteristics of autism"; "Provide opportunities for communication in the classroom throughout the day for this student"; and "Teach this student social interaction". A scale from 0 (cannot do at all) to 100 (highly certain can do) was constructed, based on Bandura's (2006)

instructions for creating SE scales. The mean score across items was then calculated, with higher scores reflecting higher SE. Teachers rated their SE to carry out specific tasks relating to teaching students with ASD, including assessment, intervention and classroom-based practice. Dimensionality, internal consistency, and construct validity were measured using a sample of 44 teachers of students with autism in special education. Preliminary support for the reliability and unidimensionality of the scale was offered, and the evidence around its validity was described as “encouraging”. ASSET scores were found to be negatively correlated with sub-scale scores of teacher stress, but uncorrelated with teacher burnout, indicating a need for replication with larger samples.

This study utilised a relatively small sample of participants (*n*=44). In addition, concurrent measures such as observations were not used to validate the SE scores derived using the ASSET. The researchers reflected upon Bandura’s (1995) contention that SE is related to a whole range of factors that were not examined within the study, These were identified as: teaching effort; perseverance in the face of obstacles and failure experiences; decreased teacher anxiety and depression, and increased teaching accomplishments. The authors recommended that research be carried out to assess the association between ASSET scores and these indicators, focusing upon specific instances of teaching children with ASD (Ruble et al., 2013).

Given the paucity of research within Europe, Dimopoulou (2012) carried out a study that sought to assess teacher SE and collective efficacy beliefs in relation to teaching pupils with autism in UK schools, with the aim of exploring the major factors in operation. Data was gathered via online questionnaires, and participants were invited to interviews to gain further understanding. Participants comprised an opportunity sample drawn from UK special schools for children with ASD. Three questionnaires were used to collect data - a demographic data form, and adapted Likert Scales to measure SE, and to measure collective efficacy (CE: this refers to the

perceptions of staff that the efforts of the school as an organisation will have a positive effect on student achievement). The SE scale was adapted from that devised by Dawson (2010, cited in Dimpoulou, 2012) and comprised a 30 item, 9-point scale entitled Teachers Self Efficacy Scale Disabilities (TSESD). The results, which were reported in 2014, suggested that teachers in outstanding schools scored higher for both self efficacy and collective efficacy. Analysis of variance within groups revealed statistically significant relationships between SE, CE and position and SE and years of experience. A link between SE, CE and achievement was therefore put forward, however it was recommended that further research be carried out in order to establish: “solid links between efficacy and school performance” (p. 1474).

For staff within schools who support children with ASD, the respective contribution of these factors warrants assessment.

2.6.8. Parenting self-efficacy in parents of children with ASD.

There is a growing body of research addressing parental SE (PSE) in relation to children with autism (e.g., Giallo, Wood, Jellett & Porter 2013). This relates to parental belief in the ability to parent successfully (Jones & Prinz, 2005). Research in this area is pertinent to the current study since it provides an insight into factors which can impact upon SE in those who have day to day care of children with ASD. For this reason, consideration is now given to the research around PSE in parents of children with ASD.

Estes, Munson, Dawson, Koehler et al. (2009) carried out an investigation into the way in which child characteristics influence maternal parenting stress and psychological distress. This research targeted mothers of preschool children with a diagnosis of ASD (*n*=51) and mothers of children diagnosed with developmental delay without autism (*n*=22). Higher levels of parenting stress and psychological distress was found in mothers parenting children with autism. Children's challenging behaviour was associated with an increase in parenting stress and psychological distress in mothers in both

groups, although the researchers acknowledged that the relationship between scores on self-report inventories and psychiatric diagnosis was complex, and the study was interpreted in this light. It was recommended that the increased scores relating to parenting stress, anxiety and depressive symptoms warranted “serious attention from clinicians” (p.384). This study overcame limitations identified within earlier studies in relation to use of standardised measures, and additionally used a comparison group of mothers with children matched for developmental level but without a diagnosis of autism. Thus, the higher demands experienced by parents of children with additional needs could not, on their own, account for the increased stress in parents of children with autism.

Based upon data within the 2003 American National Survey of Children’s Health, Schieve, Boulet, Kogan, Yeargin-Allsopp et al. (2011) studied responses of parents and caregivers of children with ASD. Difficulties in caring for their child, frustration with their child’s behaviours, and anger towards their child were reported. The Aggravation in Parenting Scale was used to compare parents of children with autism with: parents of children with special health-care needs with other developmental problems; children with special health-care needs without developmental problems; and normally developing children. Parents of children with autism were significantly more likely to score in the “high aggravation” range than any other parent sample.

It is established within the literature that PSE is associated with parental implementation of positive parenting strategies, persistence within demanding situations, and an estimation of the degree to which parents perceive themselves as capable within what is a highly demanding role (Coleman & Karraker, 1998; Jones & Prinz, 2005). Hastings and Brown (2002) carried out a small-scale study of parents of children with ASD and found that PSE mediated the relationship between the child’s behaviour problems and maternal anxiety/depression. In addition, it moderated the effect of child behaviour upon paternal anxiety. Low levels of parental SE can result in poor persistence, depression and diminished satisfaction in the role

of the parent (Johnston & Mash, 1989). Research has consistently shown that parental SE is negatively correlated with children's behaviour problems (Mouton & Tuma, 1988).

Research has indicated that parental SE is predictive of parenting stress in families with a child with a disability (Frey et al., 1989; Friedrich et al., 1985; Krauss, 1993). Hastings and Brown (2002) found that parent beliefs about their ability to parent successfully moderated the effects of the child's behaviour problems upon paternal anxiety, and mediated the relationship between the behaviour problems and maternal anxiety. Mouton and Tuma (1988) demonstrated that parental SE was negatively correlated with children's behaviour problems, and Herbert (1995) suggested that this, in addition to criticism from others in relation to parenting skills, led to decreased parental SE. Kuhn and Carter (2006) found an association between parental stress and depression, and parental SE in parents of children with ASD (n=170). As hypothesised, guilt, depression and parenting stress were negatively correlated with maternal SE. All correlations between maternal SE and cognitions were of moderate strength and statistically significant, except in relation to autism knowledge. Researchers concluded that SE appeared to be associated with well-being, agency, and feelings of guilt among mothers of children with autism.

Given the importance of the relationship between PSE and a range of parent and child outcomes, it seems appropriate to understand more about the school contribution to this picture. A primary school child attends school for up to 35 hours per week and, with additional needs will often have additional TA support both within and outside the classroom. The close and sustained nature of this relationship might be expected to mirror in some ways the experience of the parents who care for such children. The SE of the TA for supporting the pupil will therefore be key. Given the current and potential value for the construct of SE in relation to teaching (Henson, 2001), it would seem to be a valuable exercise to add to the highly limited literature in relation to TA SE in relation to ASD.

2.6.9. Self-efficacy of other professionals in relation to ASD.

Because of the paucity of work in the area of interest, it is helpful to examine the SE of other professionals who work with those with ASD. Dinecola and Lemieux (2015) sought to investigate the extent to which knowledge, interest, contact and training predicted SE in supporting those with ASD. A 7-section, 65 item questionnaire was devised, including a section relating to SE. This questionnaire was utilised with a convenience sample of 97 graduate social work students in the Unites States. The SE section was adapted from the Social Work SE Scale (Holden, Meenaghan, Anastas & Metrey, 2002) and each item derived from previous research which assessed competence of individuals to work with those with ASD. A Cronbach Alpha Coefficient of .89 was gained for the SE scale, indicating good internal consistency. Overall, low levels of SE were reported, however, knowledge of ASD and contact with people with ASD, predicted a significant proportion of the variance (18%, $p < .001$). Within this study, further psychometric testing of the scales is indicated, and generalisability is limited because of the sample size. Implications for content of social work curricula were stated, in addition to suggesting that continuing educational opportunities were required. Supervision and other resources were suggested as important sources of learning and development in the absence of classroom opportunities. Hands-on experiences also emerged as important, with field placements being seen as a way to enhance SE by building interaction with those with ASD.

2.6.10. Teaching assistant self-efficacy.

Although there are calls for the further development of TA skills within the school context, research into TA SE is scarce. Although not meeting the initial inclusion criteria for studies, in an unpublished thesis, Grahamslaw (2010) investigated TA SE in relation to Emotional Literacy Support Assistant training (ELSA). Since no pre-existing scale to measure TA SE existed, a questionnaire was developed via a focus group activity, following Bandura's

(1986) guidance on the development of SE questionnaires. A pre-post design was utilised, assessing changes in SE for TAs attending ELSA training. Because of the specificity of the sample, generalisability is not possible; however, Grahamslaw concluded that it seemed likely that ELSA training may have been associated with increases in TA SE. This supported Tschannen-Moran and McMaster's (2009) findings that teacher SE beliefs increased following relevant training.

Mills (2011) examined TA SE in relation to literature instruction. Questions were asked in relation to how TAs perceived their competency as language and literature instructors, and what were the sources and consequences of their self-beliefs. An adapted version of Tschannen-Moran and Woolfolk-Hoy's (2001) Teacher Sense of Efficacy Scale (TSES) was used in conjunction with a questionnaire in order to gain insight into TA perceptions of teaching literature. The TAs in this study did not appear to feel that they were effective instructors. Interviews indicated that three of the four *sources* of teacher SE, namely, mastery experiences, verbal persuasions and emotional indicators, were not fostered. The TAs described frequent vicarious experiences (observing their own professors), however, they felt that they had limited experience, had received limited feedback about their ability and had little frame of reference to describe their affective responses. Although findings from this research are of interest, the TAs described in this study were graduate students in the US and not TAs as we would understand them in the present context. However, the findings regarding supportive next steps for staff in building SE are of interest for the current study.

Higgins and Gulliford (2014) noted the growth in the use of TAs in mainstream schools, suggesting that previous research around their efficacy in changing outcomes for children was inconclusive. Thus a study was carried out to explore sources of influence upon TA SE and its susceptibility to training. A qualitative approach to data gathering was taken, and thematic analysis of the data was carried out. A flexible approach was adopted

whereby the researcher was able to be responsive to the data through the course of the research process, and perceptions of individuals as opposed to empirical data were sought. Sample size was low (*n* = 14) and generalisability not possible; however, the data suggested that TA SE could be understood through Bandura's (1977) theory outlining *sources of information, outcome expectations* and *whole school support and norms.* Higgins and Gulliford (2014) suggested that in order to support further research into SE, a domain-specific tool would be of value. Based upon their findings, a scale which acknowledged contextual elements (relationships, knowledge of the students, organisational factors and norms), such as that devised by Cherniss (1993), was suggested as a possible next step.

2.7. The current research study

This study aimed to fill gaps identified within the research literature, as identified above.

Although concerns around SE of TAs and attunement of their contributions within settings have been explored, SE of TAs has not been considered in relation to TAs supporting pupils with ASD. Therefore phase one of the study will explore the constructs that TAs report in relation to their performance of their role in supporting children with ASD.

A number of pre-existing scales assess teacher's SE beliefs, but there is little or no published research into TA SE, specifically in relation to supporting children with ASD. SE is a task-specific judgement, therefore a measure which focuses explicitly upon the skills required by the TAs who support children with ASD may produce new insights. Phase 2 of the study will therefore examine the SE ratings provided by TAs in relation to supporting children with ASD.

Understanding the respective sources of SE for teachers who educate children with ASD can support continuing professional development and inform the need for, and form of ongoing support. This argument holds true in the case of the TA for whom training opportunities may be fewer, but demands high. Phase 3 will therefore examine what SE beliefs TAs report in relation to supporting children with ASD, and consider ways to strengthen these beliefs.

2.8. Summary

In this chapter, the role, deployment and effectiveness of TAs in schools has been examined. The prevalence of pupils with ASD and the demands of supporting such pupils has been presented. The construct of SE has been outlined, and consideration given to research into teacher and parent SE in relation to the support for children with ASD. This has helped to provide an evidence-base from which to identify questions which merit further exploration. This research will therefore explore the SE of TAs who support children with ASD in mainstream primary schools. More specifically, three research questions have emerged, and these will be examined within the three phases of the study:

Phase 1: What constructs do TAs report in relation to their performance of their role in supporting pupils with ASD?

Phase 2: What SE ratings do TAs give in relation to supporting pupils with ASD?

Phase 3: What SE beliefs do TAs report in relation to supporting pupils with ASD?

Chapter 3 - Methodology and Method

3.1. Introduction

With regard to the context outlined in chapter 1, and the review of literature in chapter 2, this chapter provides the research rationale and outlines the research methodology. The methods used to investigate the identified research questions are then described. Consideration is given to ethical issues in conducting the research, and a timeline of the research methods is provided. The 3 research phases of this research study are discussed, with each phase including a discussion of the research design, materials, participants and data analysis.

3.2. Evidence-based practice in Educational Psychology

It has been suggested that an increased emphasis on the importance of evidence-based practice in the field of educational psychology (Fox, 2003; Miller & Todd, 2002) can lead to greater accountability (Dunsmuir, Brown, Lyadurai & Monsen, 2009). As a consequence, research has been identified as one of the key roles of educational psychologists (EPs) (Farrell, Woods, Lewis, Rooney et al., 2006). Frederickson and Cline (2009) contend that the quality of research in education continues to be a source of strong debate. It has been suggested that research in this field can only play a relatively limited role in informing practice (Hammersley,1997. However, others suggest that research should explicitly inform practice; it is through the evaluation of interventions and strategies that professionals can be informed as to what might work for specific populations, and under which conditions (Frederickson, 2002).

3.3. Purpose of the research

The purpose of this research was to explore TA perceptions of SE in relation to supporting children with ASD in mainstream primary classrooms. Within this focus, 3 research questions were identified:

- What constructs do TAs report in relation to their performance of their role in supporting pupils with ASD?
- What SE ratings do TAs give in relation to supporting pupils with ASD?
- What SE beliefs do TAs report in relation to supporting pupils with ASD?

These questions informed three research phases.

This study combined different approaches to data gathering in order to gain a deeper understanding of the construct within the specific context (Hayes, 2000). It was inductive in approach, relying upon the information derived to formulate theory.

The initial phase of the research was exploratory in nature, seeking to gain a perspective upon the factors which contribute to SE within the participant population and with specific reference to supporting children with ASD. Denscombe (2002) asserts that in such research, the researcher collects information that describes things as they are. This is in contrast to explanatory research which attempts to consider why things are as they are, and evaluative research which aims to explain how things might improve. Despite the high numbers of children with ASD being taught within mainstream schools, (as identified within chapter 1) there is little research evidence in this area, thus it is timely and adds to the limited evidence base.

The second phase of the research was exploratory in relation to a far wider sample, thus a questionnaire approach was deemed an effective way of

ascertaining views. This led to a more explanatory third phase where semi-structured interviews were employed with a targeted group, in order to triangulate data and provide some evaluative information.

This piece of research thus comprises both qualitative and quantitative phases within a mixed methods design.

3.4. Research orientation and epistemological perspective

Crotty (1998) suggests that there are four questions to consider in defining a research proposal: what theory of knowledge or epistemology informs the research (eg, objectivism, subjectivism); what theoretical perspective lies behind the methodology (eg, positivism, interpretivism); what methodology governs our choice of method (experimental, survey), and what methods will we use (questionnaire, interview, focus group).

3.4.1. Paradigm.

Research is strongly influenced by the paradigm, or belief system, adopted by the researcher (Hennink, Hutter, & Bailey, 2011). Doyle, Brady and Byrne (2009) suggest that differences in paradigm influence “how we know, our interpretation of reality and our values and methodology in research” (p. 176).

Epistemological assumptions concern the way in which knowledge is gained (Willig, 2001), for example, researchers may vary in the degree to which they emphasise objectivity in relation to data collection (Creswell & Plano Clark, 2011). Paradigms are influenced by personal experience, culture and history and are not necessarily static (Creswell & Plano Clark, 2011), thus the world view of the individual who carries out the research, interprets and reports it is a key influence.

Guba (1990) asserts that paradigms are characterised by ontology (what is the nature of reality), epistemology (how do we know something?) and methodology (how do we find out?). The ontology varies depending upon the degree to which researchers support the possibility of singular or multiple realities (Creswell & Plano Clark, 2011).

The two primary research paradigms could be described as quantitative and qualitative (Creswell, 2003; Moon & Moon, 2004). In purely quantitative research, assumptions are consistent with a positivist paradigm in that the researcher is seen as separate from the entities observed, thus the research is seen as objective (Johnson, Onwuegbuzie & Turner, 2007). Quantitative methods use a range of approaches to collect numerical data (Moon & Moon, 2004), and according to this paradigm, researchers should remain detached, test stated hypotheses and adopt a formal style of writing to record the research findings (Johnson et al., 2007).

Qualitative methods gather descriptive data via activities such as observations or focus groups and the data gained is descriptive in nature (Moon & Moon, 2004). Knowledge claims are primarily based upon constructivist perspectives, or advocacy/participatory perspectives (Creswell, 2003). Within qualitative approaches, it has been recommended that researchers present a rich, detailed and empathetic description, which is written more informally than that for the reporting of quantitative data (Johnson et al., 2007). Open-ended data is collected with the intent to develop themes (Braun & Clarke, 2006). Bogdan and Biklen (2006) state that qualitative research is the best way to study human behaviour and to capture human experience. Researchers such as Bronfenbrenner (1986) emphasise the value of qualitative research in generating and creating knowledge. Findings are discovered rather than just being verified via qualitative methodologies. It is naturalistic (i.e. within the setting in which the behaviours/ interactions/ learning are taking place) and allows the rich picture to be created. It uses the thoughts and words of those who contribute to the research.

Quantitative paradigms have the benefit of enabling the researcher to study many participants in the most time-effective manner (Johnson et al. 2007). Surveys involving questionnaires or structured interviews for data collection can be utilised with the intention to generalise from the sample to the population (Babbie,1990).

Having considered the aims of the research, it was decided to employ a mixed methods design in which a qualitative phase informs the quantitative phase of the study (Miller & Crabtree, 1999). An exploratory phase based upon thematic analysis of focus group data was followed by a paradigm that allowed the researcher to gain views from a larger sample in a time-effective manner using a questionnaire. Semi-structured interviews with participants then sought to enable a deeper level of explanation, and allowed a rich picture to be created.

3.4.2. Epistemology.

The researcher makes assumptions about what there is to know (ontology). These lead to assumptions about what can be known (epistemology). These lead in turn to the methodological assumptions (Lopez & Potter, 2001, cited in Moore, 2007).

Johnson et al. (2007) suggest that mixed methods approaches are guided by a philosophy that seeks to fit together “the insights provided by qualitative and quantitative research into a workable solution” (p. 16), namely pragmatism. There is a focus upon what works, and it is solution-focused (Patton, 2002). Pragmatists advocate selection of an appropriate methodology to best fit the research question (Robson, 2011). Thus both qualitative and quantitative approaches can be appropriately used within a piece of research.

This study is aligned with a pragmatic philosophy which offers both a value-driven as well as a practical position. The researcher believes that this is appropriate to the real-world context in which the research is being carried out. The aims of this study and the research questions posed fit within a pragmatic position and support the adoption of a mixed methods design.

3.4.3. Mixed methods design.

Johnson and Onwuegbuzie (2004, p.17) define the mixed methods approach as “the class of research where the researcher mixes or combines quantitative research techniques, methods, approaches, concepts or language into a single study”. Scott (2007) contended that the mixed approach was acceptable to educational researchers, going beyond the historical divide between the two paradigms. Bryman (2006) further proposed that such an approach be seen as a third research paradigm.

According to Creswell (2003) mixed method data collection can occur either sequentially or concurrently. Within this study a sequential strategy is utilised in which the researcher will elaborate on or expand findings gained using one method, by using another (Creswell, 2003). The researcher believes that collecting a range of data will develop understanding of the research problem: a qualitative method is used in the initial stages to gain exploratory information. A quantitative method is then employed in order to examine the construct of SE of TAs supporting children with ASD. The importance of gaining an understanding of the social construction of the participants’ experiences is recognised. Therefore, the interpretivist paradigm informs the qualitative aspect of the study (Mackenzie & Knipe, 2006).

It is hoped that within this research a mixed methods approach will counterbalance limitations of either method (Creswell & Clark, 2011), drawing from both qualitative and quantitative assumptions, and thus helping to answer questions that cannot be answered by using one method alone.

Bearing in mind the above factors, this research aims to explore the factors which impact upon SE in relation to TAs supporting children with ASD in mainstream primary schools.

3.4.4. Reflexivity.

Reflexivity has been increasingly recognised as crucial within the process of generating knowledge via qualitative research (Ahmed, Hundt & Blackburn, 2011; D'Cruz, Gillingham & Melendez, 2007; Berger, 2015). Finlay (2002) contends that reflexivity involves making the research process itself a focus when carrying out a study. Bolam and Chamberlain (2003) explain that researchers use an active process of reflection to consider how they might have influenced the data. Consequently, as a researcher, the need to focus on self-knowledge was understood and there were explicit attempts to understand the impact of this role in the creation of knowledge, with reflection upon the impact of biases, beliefs, and personal experiences upon the research outcomes (Bradbury-Jones, 2007; Pillow, 2003; Stronach, Garratt, Pearce & Piper, 2007). It is acknowledged that another researcher might make different interpretations of the data since we are all informed by our own theories and beliefs, in line with a social constructionist perspective.

3.5. Ethical considerations

All phases of the research were carried out within the British Psychological Society's Code of Conduct and Ethical Guidelines (2009) and approved by the Cardiff University, School of Psychology ethics committee.

Barbour (2007) explains that ethical issues must be considered within all research projects, not just in relation to groups of individuals perceived as vulnerable or disadvantaged. Ritchie, Lewis, Nicholls & Ormston (2013) suggest that all research carried out ethically is:

- worthwhile and not unreasonably demanding for participants;
- based upon informed consent;
- voluntarily entered into;
- risk of harm is known and adverse consequences are avoided;
- confidential with anonymity respected.

In all phases of this study, participants provided informed consent. All participants were provided with information informing them that they were able to decline or withdraw from participating in the research at any time without consequence (British Educational Research Association, 2004; British Psychological Society, 2004).

Further detail regarding ethical considerations in relation to the different phases of the study is provided below.

3.6. Research phases

This study comprised a number of phases in order to answer the research questions:

- Phase 1: What constructs do TAs report in relation to their performance of their role in supporting pupils with ASD?

This phase required the gathering of qualitative data via focus groups to inform the constructs of SE in TAs supporting pupils with ASD in primary classrooms.

- Phase 2: What SE ratings do TAs give in relation to supporting pupils with ASD?

An online questionnaire using the Qualtrics system was developed, piloted and utilised to identify the SE judgements made by TAs supporting children with ASD in primary classrooms using the themes provided in phase 1 of the

study in addition to the relevant research to adapt a pre-existing questionnaire. This phase identified 2 participants scoring in the highest, and 2 participants scoring in the lowest centiles for inclusion in phase 3 of the study.

- Phase 3: What SE beliefs do TAs report in relation to supporting pupils with ASD?

A semi-structured interview was used in order to gain rich qualitative data in relation to SE beliefs utilising four participants as identified in phase 2 (see above).

3.7. Research timeline

A timeline of research methods is provided (**Appendix A - Research timeline, p. 238).**

3.7.1. Phase 1 - What constructs do TAs report in relation to their performance of their role in supporting pupils with ASD?

Although there is a wealth of research which examines teacher SE (TSE) (as identified in chapter 2), the research into TA SE and SE in relation to supporting children with autism, is sparse. A highly limited body of research exists within the field of TAs and SE (e.g, Grahamslaw, 2010; Higgins & Gulliford, 2014), and none of this research focuses upon pupils with ASD. SE scales have been developed to explore SE in relation to specific teacher tasks (Dimopoulou, 2012), but not for TAs working in mainstream primary schools in the UK.

Psychological constructs such as SE can be difficult to assess using single items, and use of a scale allows more accurate measurement (McIver & Carmines, 1981, DeVellis, 2012). Scales are based upon groups of items which are designed to assess the construct under examination, allowing the

researcher to ask a series of questions which capture a range of aspects of the construct.

A content review of social science articles using mixed methods design (Bryman, 2006) found the self-administered questionnaire to be the most widely used quantitative method.

Questionnaires ask direct information about opinions and facts (Hayes, 2000) via a list of written questions. The collated information is then analysed (Denscombe, 2002). There is no direct contact between researcher and respondent (Robson, 2011), therefore the researcher can attend to the design and administration without any impact of face-to-face interaction with the participants (Denscombe, 2002).

The goal of any questionnaire is to develop a list of items that all respondents will interpret in the same way, respond to accurately, and be willing to answer (Artino, La Rochelle, Dezee & Gehlbach, 2014). The use of open versus closed questions has been debated (Bulmer, 2004). Closed questions are more difficult to construct but easy to analyse; conversely, open questions are easy to construct but are more difficult to analyse (de Vaus, 2002, Sarantakos, 2012). Good questionnaire design is crucial if data which helps to answer the research question is to be generated (Bulmer, 2004; Creswell, 2003; de Vaus, 2002; McGuirk & O'Neill, 2005; Oppenheim, 1992; Sarantakos, 2012).

There are a number of benefits of using questionnaires (Gilham, 2008, Hannan, 2007): they are time-effective; an effortless way to gain a high number of responses in a short time; fairly straightforward to analyse; there is no interviewer bias; and the questions are standardised. However, Gilham (2008) does report criticism of such an approach: questions may be misinterpreted by respondents, and the phrasing of questions can impact upon responses. It was judged that the benefits of a questionnaire outweighed possible disadvantages within phase 2 of the research, and a

questionnaire was therefore utilised to gain quantitative data from TAs with regard to their SE in supporting children with ASD. The Qualtrics Online Survey software was employed, allowing access to a wide number of participants in a non-invasive and highly time-efficient way.

Due to the specificity of the items required within the scale, an individualised approach was necessitated. A review of the literature helped to identify survey scales or items that could be adapted (Gehlbach & Brinkworth 2011), and a focus group utilized to identify items which would be used to amend the scale.

3.7.1.1. Focus groups

Focus groups have been employed by many researchers as a qualitative method to inform questionnaire design (Detmar, Bruil, Ravens-Sieberer, Gosch et al., 2006). Threlfall (1999) suggests that the use of focus groups to inform questionnaire development is potentially very helpful, particularly when a topic has not been researched in depth previously (Nassar-McMillan & Borders, 2002). Gehlbach and Brinkworth (2011) indicate that once the need for a questionnaire to examine a specific construct is required, it is necessary to ascertain how the prospective participants conceptualise the construct. It may be that their responses differ from that already captured within the literature. Thus, data needs to be collected from individuals who resemble the potential participant population. Constructs and response categories which the researcher has not identified can thus be included in the scale development. A focus group provides the opportunity to do this effectively.

Focus groups have a number of advantages. They have been perceived as providing quick results (Fontana & Frey, 1994; Gibbs, 2012). They can generate complex information at low cost and in any context (Kroll, Barbour & Harris, 2007) and be used with a variety of populations. They are a good method when the researcher wishes to elicit participants own

understandings, opinions and views (Wilkinson 2006), allowing the researcher to “get closer to the data” (Ivanoff & Hultberg, 2006 p.126), and to appreciate how others see their own reality.

Participants can find their involvement enjoyable, empowering, and informative (Kroll et al., 2007). Additionally, they are well suited to sensitive discussions (Frith, 2000). Benefits of the approach are supported by Raibee (2004) and Wilkinson (2006) who agree that focus groups combine effectively with quantitative methods and can provide useful insights into the development and adaptation of questionnaires.

Despite such advantages, clear requirements are to be met for a focus group to be seen as rigorous and meaningful (MacDougall & Fudge, 2001). The method can be seen as unstructured and as producing large amounts of information which can be difficult to summarise. Sample size is often small, and data cannot be aggregated across different participant populations. A focus group would not have been the method of choice if generalisable data and statistical analysis was required (Wilkinson, 2006), however, with an understanding of the limitations identified in the literature, the focus group approach was selected as the qualitative method to inform questionnaire development in order to support exploration of the research focus.

3.7.1.1.1. Focus group size

Focus group size is recommended variously within the literature to be between 4 and 8 (Kitzinger, 1995), 6 to 12 participants (Morgan, 1997) or 6-8 participants (Heary & Hennessy, 2002). Boddy (2005) identifies that groups are most often composed of 8 individuals. Merton, Fiske and Kendall (1990, p. 137) contend that; ‘the size of the group should manifestly be governed by two considerations...it should not be so large as to be unwieldy or to preclude adequate participation by most members nor should it be so small that it fails to provide substantially greater coverage than that of an interview with one individual’.

Based upon this advice, a purposive group of 7-9 TAs experienced in supporting children with ASD in mainstream primary schools was sought. The upper end of the suggested range was selected in case of absence/drop out on the day. It was felt that this number of participants would be productive and encourage participation of all members (Prince & Davies, 2001).

3.7.1.1.2. Focus group participant inclusion and recruitment

Participants can be selected for a focus group via purposive or "judgemental" sampling (Vaughn, Schumm & Sinagub, 1996) on the basis that the researcher believes that these participants will be the most useful in answering the research question. Questions of homogeneity versus heterogeneity of participants require consideration (Morgan, 1997; Krueger & Casey, 2009), with Vaughn et al. (1996), suggesting that the former is most successful. It has been suggested that when the participants are unknown to each other they may disclose information more freely. The presence of individuals with a range of perceptions can be helpful in providing rich data.

Purposive sampling identified the participants for the first phase of the study. A letter was sent to the 87 infant, junior and primary school head teachers within one quadrant of the LA explaining the research project and asking permission to recruit TAs, who had worked/were working with a pupil with ASD and/or attended EarlyBird Plus or Cygnets training, to a focus group activity. These courses for families of children with autism promote professional attendance, therefore TAs supporting children with ASD might easily be identified in this way. The head teacher was asked to disseminate an information sheet to any TAs in their school who met these criteria, and was informed that the researcher would telephone the school within 2 weeks to gain the names, telephone numbers and emails of staff who might be interested in taking part. **(Appendix B: Gatekeeper letter to Head Teacher, p. 239)**.

An Information sheet explaining the research was enclosed with the head teacher letter, to be handed to TAs **(Appendix C: Information sheet for Teaching Assistants, p. 240)**.

A telephone call was made to the head teacher within 2 weeks to request the name, telephone number and email of staff who had agreed for these details to be passed on to the researcher.

This activity provided a possible 14 participants. An email was sent to each TA who had offered to participate **(Appendix D: Email to teaching assistants who have agreed to participate in the focus group, p. 242)**. Participants were then selected at random by picking names out of a hat.

A follow up email was sent to confirm arrangements with the TAs who had agreed to attend the focus group. This was followed up by a confirmatory letter to the school for the attention of the TA, which included a map to the location and further details about what would happen at the session **(Appendix E: Focus group confirmation letter, p. 243)**.

Although Krueger and Casey (2009) and Masadeh (2012), suggest providing an incentive to attend a focus group, it was deemed unnecessary in this case since participant attendance had been agreed by all head teachers and the group was taking place within the working week. Because of the size of the authority, as indicated within the information sheet for TAs, reimbursement of travel expenses of up to £10 per participant, in addition to refreshments, was offered.

12 head teachers responded positively to the request for TA involvement in the focus group. 14 TA names were put forward for the study. 8 TAs were randomly selected for participation, ranging in age from 25-30 years (1 participant) to 51-60 years (1 participant). 4 participants emerged within the 41-50 years age range. One participant was male and 7 were female.

Volunteer bias means that this was not a representative sample of TAs and this is acknowledged within the research **(Appendix F: Demographic data form for focus group participants, p. 245)**.

3.7.1.1.3. Focus group location

The focus group took place in a primary school that was able to offer a neutral, accessible private and comfortable space (Vaughn et al., 1996, Masadeh, 2012). A circular arrangement was set up to allow all participants to see each other, and the room set up for the specific number of attendees (Masadeh, 2012). Refreshments were offered on arrival of the participants, and reimbursement for travel made at the close.

3.7.1.1.4. The role of moderator

Morgan, Fellows and Guevara (2008) suggest that the researcher should not facilitate the group since this can lead to bias. However, others counter this view, reiterating the exploratory nature of the task. Nassar-McMillian and Borders (2002) support the role of the researcher as moderator specifically because he/she does have knowledge about the subject which helps to maintain the group focus. The researcher therefore acted as “moderator” for the group, asking the questions, and assisting the participants in discussing them, encouraging participation and keeping the discussion flowing.

Prince and Davies (2001) maintain; ‘Moderators who display an intrinsic interest in the research topic, overt friendliness, a sense of humour, an insatiable interest in people, a curiosity and openness to new insights, and a willingness to listen are more likely to encourage participants to share their experiences’ (p.208). As moderator the researcher actively encouraged members of the group to communicate with each other, with such interaction being a key feature of the focus group (Morgan, 1997). Within the group the researcher was alert to the possibility of more dominant members creating a competitive environment (Dreachslin, 1999).

3.7.1.1.5. Focus group length

The time required for an effective focus group is debated within the literature (Stewart & Shamdasani, 2014), and varies between 30 minutes and 2 hours (Willig, 2001), including time for "warming up" at the beginning and the debriefing at the end of a session (Wilkinson, 2006). A number of researchers advocate 1 1/2 to 2 hours as being the optimum in terms of producing the maximum amount of information required (Leitão & Vergueiro, 2000, Greenbaum, 2003). The researcher elected to follow this guidance in planning for the group.

3.7.1.1.6. Focus group process

The focus group was run within a local school. **(Appendix H: Focus group preparation, p. 248),** according to the procedure outlined **(Appendix I: Focus group procedure, p. 249)**.

On arriving at the focus group, written consent was obtained from each participant (**Appendix J: Informed consent - focus group discussion, p. 251)**. Participants were assured that participation was voluntary, and that they could withdraw at any time without giving a reason. They were informed that information would be held confidentially, and that data would be anonymised at the end of the study. Participants were able to ask for the information they provided to be deleted or destroyed at any time up until transcription and analysis (3 week period).

An introductory script was read to participants at the beginning of the session (Krueger & Casey, 2009). This comprised a welcome and introductions, followed by an overview of the research being conducted (Finch & Lewis, 2003). (**Appendix K: Focus group introductory script, p. 253).**

A sheet requesting responses to classifying questions was completed by each participant in order to support any further analysis of the data **(Appendix F: Demographic data collection for focus group participants, p. 245).**

A series of questions was devised by the researcher to prompt discussion within the group (Finch & Lewis, 2003). Krueger & Casey (2000) note that good focus group questions are: conversational; clear, and free from acronyms and jargon; easy to say; open-ended and one-dimensional.

Questions for the focus group were linked to the research questions and provided a guideline for the group discussion. Moderator prompts were prepared in advance (Vaughn et al. 1996). The questions were designed to be of sufficient specificity to guide the researcher, yet allow flexibility to probe and elicit information from the participants (Vaughn et al., 1996). Sufficient questions were prepared to maintain discussion during the duration of the activity.

The type of questioning in the group was sequential, moving from the general to the specific (Eliot, 2007, Morgan, 2002) and served a range of purposes (Krueger & Casey, 2000):

- Engagement questions: to put the participants at ease and create a comfortable environment open to participation (2 questions).
- Exploration questions: penetrating, well-constructed questions that get to the heart of the discussion (8 questions).
- Exit questions: further questions and comments are invited and a check made re-anything that has been missed (3 questions) (**Appendix L: Focus group questions and moderator prompts, p. 254**).

Consideration was given as to whether or not to send a discussion schedule prior to the focus group. A disadvantage is that participants might formulate socially acceptable responses, and find out others' experiences/perceptions

prior to the activity; therefore a decision was made to present the schedule within the group.

At the end of the focus group, the debrief form was provided **(Appendix M: Focus group interview debrief form, p. 256).** This debrief was less detailed than that provided within phases 2 and 3 since the same participants might later complete the questionnaire or semi-structured interview, thus avoiding undue influence.

The researcher was aware of the sensitivities of staff who might not feel self-efficacious, and was prepared to individually signpost them towards further reading, training or sources of support at the end of the focus group activity if required.

3.7.1.2. Focus group data analysis

Analysis of qualitative data aims to provide meaning within a situation rather than the “truth” about a situation which would be the goal of quantitative methods (Rabiee, 2004).

Analysis has been described as “the interplay between researchers and data” (Strauss & Corbin, 1998, p.13), a description which acknowledges the way in which the researcher is subjective in the selection and interpretation of the data. The researcher was keenly aware of this subjectivity at each stage of the design and analysis process.

The type of data analysis carried out is dependent upon how the information is then to be used (Fern, 2001). Although Stewart and Shamdasani (2014) have suggested that transcript data does not necessarily require transcription, the researcher elected to do so since the research design relies upon the data to modify a pre-existing scale (Wilkinson & Birmingham, 2003).

The recorded focus group discussion was listened to a number of times to allow for immersion, and orthographic (verbatim) transcription then carried out. The transcription notation system utilised was based upon that suggested by Braun and Clarke (2013), which in turn was adapted from Jefferson (as cited in Braun & Clarke, 2013).

Thematic analysis of the transcriptions was the principal initial method of data analysis utilised within the first phase of the research (Attride-Stirling, 2001; Boyatzis, 1998; Braun & Clarke, 2006, 2013; Rubin & Rubin, 2005). Thematic analysis has been described as a basic human activity which enables one to make meanings in a range of social, cultural and political contexts (Boyatzis, 1998). It enables the exploration of qualitative data in order to produce useful and meaningful results, and can be used flexibly to identify patterns within the data, which can be identified from an inductive or bottom-up manner, or via a deductive, or top-down approach.

The six-phase model described by Braun and Clarke (2013) was used to guide an inductive process whereby the development of themes based upon participants' comments took place.

Table 2: Stages of coding and analysis based on Braun and Clarke (2013).

1	Transcription
2	Reading and familiarisation, taking notes of items of potential interest
3	Coding across the entire dataset
4	Searching for themes
5	Reviewing themes and producing a thematic map (provisional themes, sub-themes and relationships between them are mapped)
6	Defining and naming themes

7	Finalising the analysis in written form

This fits with the epistemological perspective taken in this study, in which pragmatism allows freedom of choice in selecting methods that best meet the researcher's needs (Creswell, 2003).

Since the process of transcription provides familiarity with the data (Hammersley, 2010), the transcripts were read and reread, and salient themes notes on each reading. The entire dataset was examined in order to identify everything of interest or relevance within this phase of the research (Braun & Clarke, 2013). The transcripts were then coded by allocating a distinct word or concise phrase that captured the essence of the data in order to provide the "building blocks of analysis" (Braun & Clarke, 2013, p. 207).

Braun and Clarke (2006) argue that if one becomes too absorbed in the data set before beginning coding, this may result in the researcher developing a narrow analytical field of vision, which can result in a biased emphasis on some aspects of the phenomenon and the disregarding of other crucial aspects (Braun & Clarke, 2006). Despite these contentions, Braun and Clarke (2013) and others (Boyatzis, 1998, Miller & Crabtree, 1999; Fereday & Muir-Cochrane, 2006) do recognise the advantages of immersion into the data set and the development of a comprehensive understanding rather than just performing a mechanical coding process which is absent of meaning (Lapadat & Lindsay, 1999).The researcher followed the latter advice which enabled in-depth knowledge of the dataset and supported further analysis.

Within this study, an inductive stance was taken, whereby codes and themes emerged from the data set, thus reflecting the epistemological stance, with an emphasis upon the exploratory nature of this stage of the research process. Once the data set had been coded, it was revisited over time and

any modifications were made, with the researcher attempting to ensure that coding was inclusive, systematic and thorough (Braun & Clarke, 2013).

A theme “represents some level of patterned response or meaning within the dataset” (Braun & Clarke, 2006, p.82), being broader than a code and capturing a number of facts about the concept. At this stage, relationships between codes and possible themes began to become apparent and it was then possible to recognise and define sub-themes and overarching themes. This mirrored the description provided by Attride-Stirling (2001) who explained that the lowest order themes drawn from the data make sense when combined with each other. Overarching themes are described as themes that encompass the principle metaphors in the data as a whole (Attride-Stirling, 2001).

Themes were then defined, refined and named.

3.7.1.3. Establishing Validity and Reliability

In carrying out this research it was noted that Golafshani (2003) asserts that reliability and validity are rooted within a positivist perspective and require redefinition within naturalistic approaches. Within real-world contexts the researcher does not manipulate the phenomenon that is of interest, instead, the phenomenon reveals itself via the methods of study. Therefore the concept of validity is not universally fixed within qualitative research and is partly dependent upon the researcher’s perception of ‘validity’, which is likely to be guided by the assumptions associated with the research paradigm.

The influence of the researcher was therefore acknowledged as a potential source of error or bias within this qualitative aspect of the research, and reliability would be assured only if a different researcher generated the same results using the same measures (Yardley, 2008). For example, the way in which the focus group was run depends upon the skills and knowledge of the researcher, and the analysis of the data produced depends upon the

researcher's experience and perspective. Thus the qualitative approach at this stage of the research process acknowledges the "context-bound nature of reality" (Braun & Clarke, 2013, p.279) and the need for reflexivity.

A clear trail of evidence was established in order that another researcher might verify the current findings, thus to increase rigour and guard against pre-judgement and selective perception (Williams & Katz, 2001; Rabiee, 2004). Transcripts with initial coding were shared with a group of experienced assistant educational psychologists. The codes and themes were reviewed, and the relationships between them considered. As a result of this, some codes were revised, and themes developed further. This increased the researcher's confidence that data placed within a theme was well placed.

3.7.2. Phase 2 - What SE ratings do TAs give in relation to supporting pupils with ASD?

3.7.2.1. Questionnaire design

Surveys or questionnaires can be effective tools in gathering data about abstract ideas, concepts and beliefs (Artino et al., 2014). They support the collection of data in relation to behaviours that are not directly observable as long as respondents are willing to engage.

Since the construct of perceived SE is domain specific, no all-purpose measure can exist (Bandura, 1997, Bandura, 2006). Non-observable constructs can be difficult to measure using single items, thus a scale can allow for more accurate measurement (DeVellis, 2012).

It is suggested that there can be good reasons to use or to adapt pre-existing questionnaires in seeking to investigate a construct (Artino et al*.,* 2014), often for reasons of ease and practicality. Having assessed a wide range of pre-existing SE instruments and taken into account the demands of constructing a standardised scale (McIver & Carmines, 1981, DeVellis,

2012), the researcher made an informed decision to amend a pre-existing scale. Therefore, the themes provided by the focus group data were used to adapt a questionnaire to measure TA SE for supporting children with ASD in mainstream primary classrooms. The ASSET (Autism SE Scale for Teachers) was used as the basis for the electronic questionnaire devised for the study on the basis of the evaluations of its dimensionality, internal consistency, and construct validity by Ruble et al. (2013). Its domain specificity (i.e., for teachers of children with autism) meant that it most accurately lent itself to amendment to reflect the task of the TA in supporting children with ASD.

3.7.2.1.1. Devising items

In order to adapt the ASSET, the themes identified from the focus group data were used to devise items to measure TA SE for supporting children with ASD. The items reflected the constructs identified by TAs, and where possible, vocabulary gained via the focus group activity was adopted. In addition to the focus group data, reference was made to findings from the literature review, and to documents including the Schools Autism Competency Framework (Wittemeyer, English, Jones, Lyn-Cook, et al., 2015) and Education Endowment Foundation guidance on effective use of TAs in schools (Sharples, Webster & Blatchford, 2015) in order to optimise the chances of the tool being representative in terms of TA tasks in relation to children with ASD, and the construct of SE **(Appendix O: Item development for the TASCA, p, 270)**.

The goal of a scale or questionnaire is to offer a set of items that respondents interpret in the same way, with accuracy and with a willingness to answer (Artino et al. 2014). In addition to reference to the ASSET items, the Hayes (2000) and Artino et al. (2014) best practice guidelines for writing items was consulted. The researcher sought to avoid the pitfalls identified in relation to research design, including avoidance of double-barrelled items (Dillman, Smyth & Christian, 2009), wording items positively, and using

statements instead of questions (Dillman, Phelps, Tortora, Swift et al., 2009). Items should be phrased in terms of “can do rather than will do” (Bandura, 2006, p.308).

Measuring SE requires “more than simply asking about one’s generalised perceptions of competence in the given domain” (Bong, 2006, p. 290). Asking whether someone is good at certain tasks or possesses certain abilities differs from “asking whether one can execute, with those recognised capabilities, the requisite course of action to meet a variety of situational demands for achieving successful performance” (p. 290).

Bandura (2006) recommends that perceived SE should be measured against levels of task demand. These represent impediments to successful performance, thus appraisals of perceived SE reflect the level of difficulty an individual feels he/she can surmount. When there are no obstacles to successful performance an individual is highly efficacious.
Thus constructing a scale requires the identification of the challenges to efficacious performance within the specific domain. The identified challenges are then built into the scale’s efficacy items. Ceiling effects should be avoided by building in sufficient gradations of difficulty or challenge (Bandura, 2006).

Because SE is concerned with an individual’s perceived capabilities and not with their beliefs about whether they can perform the task at a higher or lower level than another individual, items that ask the respondent to compare their abilities with those of others are not reflective of SE and were not utilised (Bong, 2006).

3.7.2.1.2. Differentiating responses

Since a pre-existing scale (ASSET) was adapted for this study, a continuous 0-100 scale, as utilised in the ASSET, was maintained (Ruble et al., 2013). As with the ASSET, verbal labels were utilised for the initial and final

response option in an attempt to reduce cognitive effort and reduce measurement error (Christian, Parsons & Dillman, 2009) with the descriptors "I cannot do at all" and "I am certain I can do" being utilised.
Whilst reverse item scaling has been recommended in order to focus attention upon the direction of scales (Carifo & Perla, 2007), this was not utilised in this study in order to maintain the format of the ASSET scale.

3.7.2.1.3. Number of items

In designing a questionnaire, the number of items required to assess the construct depends upon a range of factors including the complexity of the construct and the level of depth of analysis (Artino et al., 2014). DeVellis (2012) contends that "adequate measures are a necessary condition for valid research" (p. 15), so that conclusions reached are valid. Sarantakos (2012) asserts that a questionnaire should contain as many questions as necessary and as few as possible, with each question having a clear role and purpose (McGuirk & O'Neill, 2005). A questionnaire that is too brief to be reliable is not helpful (DeVellis, 2012) and might represent a poor use of participant time and effort, having ethical implications as well as the scientific ones (DeVellis, 2012).

This advice was taken into account in hand with the expert panel feedback. (**Appendix P: Expert panel task prompts for content validation, p. 273**). The resulting questionnaire comprised 36 scaled items. Demographic data for participants was gained via a final section of the questionnaire, comprising 7 closed questions. These were followed by a a question asking whether or not the participant would be willing to take part in a short interview with the researcher at a time and place to suit themselves **(Appendix R: Teaching Assistants Supporting Children with Autism – TASCA Scale, p. 276).**

3.7.2.1.4. Establishing validity and reliability

Development of a valid and reliable questionnaire is essential in order to reduce measurement error. Once the draft survey was created, content validity was established to ensure that the items contained within the questionnaire were relevant to the construct of SE of TAs supporting children with ASD in mainstream primary classrooms (Polit & Beck 2006), and to ensure that no key indicators had been omitted (Waltz 2005). In order to achieve this, ASD specialists (members of the local Specialist Teaching Team for language and communication) were asked to trial the questionnaire (Oppenheim, 1992), and comment upon the degree to which items appeared to measure the construct, comprehensibility and clarity of each item, and consider any questions which were ambiguous, leading or biased (Dreachslin, 1998, Radhakrishna, 2007). Length of time taken to complete the questionnaire was also assessed. (**Appendix P: Expert panel task prompts for content validation, p. 273)**. Based upon the 4 feedback forms received, the final number and content of scale items was determined (Gehlbach & Brinkworth, 2011) **(Appendix Q: Feedback from expert panel task prompts for content validation, p. 274).**

3.7.2.1.5. Minimising response bias

Safeguards to minimize motivational effects of self-assessment were built into the instructions and mode of administration of the questionnaire (Bandura, 2006): social evaluative concerns were reduced by asking for completion of the scale without personal identifiers. Additionally, respondents were informed that responses would remain confidential and be used only with codes by the researcher.

The questionnaire was labelled with a general title - Teaching Assistants Supporting Children with Autism (TASCA) - so that there was no pre-judgement of content by respondents (Bandura, 2006) **(Appendix R: Teaching Assistants Supporting Children with Autism (TASCA) Scale, p. 276)**.

3.7.2.2. Implementation of the questionnaire

All participants were selected through a non-probability purposive sampling technique in which any potential participants - TAs working with children with ASD in mainstream primary schools - were located via an email to all Head Teachers within the county. This comprised 300 Infant, Junior and Primary schools. **(Appendix S: Gatekeeper email to head teachers, Phase 2, p. 288)**. An information sheet was included, explaining the study and rationale, why the individual was selected for the study, indicating the length of time the questionnaire would take to complete and the intended use of the results (Dunn, 2005) **(Appendix T: Information sheet for Teaching Assistants who might be interested in completing the online questionnaire, p. 290).**

A follow-up email was sent to all head teachers within 2 weeks of the letter being sent, as a reminder that an initial email had already been received. The head teacher was asked to consider the options once more and to cut and paste part of the email and send to the TAs within the school who might be interested in completing the questionnaire **(Appendix U: Follow-up email to head teachers, p. 292).** Participants were then able to access the link to the online questionnaire.

The Qualtrics online survey tool was used to disseminate the questionnaire. Participants were required to read a statement which explained the questionnaire purpose and content, their right to withdraw from the survey at any time without consequence (Hayes, 2000), and their anonymity within the publication of the results (Oppenheim, 1992). This was achieved via checking a Yes/ No binary option. On ticking the latter, the participant was taken to the end of the survey without completing any items using the Display Logic function **(Appendix R: Teaching Assistants Supporting Children with Autism (TASCA) Scale, p. 276)**.

By default, survey responses contain information about the respondent's IP address. The IP address information was removed from all survey

responses, by checking the Anonymize Responses option in the Survey Options.

Demographic data were collected within a section at the end of the questionnaire (Oppenheim, 1992) to support any further analysis of the data.

Debrief information was sent automatically to all participants as an “End of Survey” message on completion of the questionnaire.

The ultimate sample size was determined by the number of head teachers within the county who selected option 2: “(ii) Yes, I do have TAs supporting children with ASD and will pass on your information sheet to them so that they can decide whether or not to take part in your study”, and the number of TAs supporting children with ASD who then elected to complete the questionnaire. 50 participants completed the online survey.

3.7.3. Phase 3 - What SE beliefs do TAs report in relation to supporting pupils with ASD?

3.7.3.1. Semi-structured interviews – SSIs

Triangulation was utilised to overcome the limitations of an individual method of collection (Alsaawi, 2014). This involves the use of a number of methods and sources to extend inference from the data, or to check integrity of the existing data set (Ritchie & Lewis, 2009; Moran-Ellis, Alexander, & Cronin, 2006). Thus to add breadth and depth to the analysis (Fielding & Fielding, 1986), an additional perspective was sought.

The most widely employed tool for collecting information in qualitative research is the interview (Cassell, 2005; Nunkoosing, 2005). Since a structured interview “lacks richness and limits the availability of in depth data” (Alsaawi, 2014, p. 151), and limits researcher flexibility, SSIs were deemed an appropriate method to allow both researcher and respondent the freedom

to further explore impacts upon TA perceived SE in supporting children with ASD (Alsaawi, 2014, Hayes, 2000).

3.7.3.2. Interview items

Interview questions were based upon the literature search, in addition to the focus group and questionnaire data in order to explore the impacts upon perceived SE in more depth. Additionally the 5 phase format suggested by Robson (2011) was employed, namely:

Introduction (the aims are described); warm-up (easy questions to start); main body (a focus on the main research focus; cool-off (simple questions to conclude) and finally closure, where the interviewee is thanked for his/her contribution.

Lengthy questions, leading questions and questions involving jargon were avoided (Cohen, Manion & Morrison, 2007; Robson, 2011) and prompts and probes were utilised to facilitate elaboration of responses (Cohen et al. 2007). Although the questions followed a common sequence (Robson, 2011), the semi-structured design allowed the interviews to function as a "conversation with a purpose" (Merriam, 2009, p. 71). Questions were modified according to the flow of the interview, and unplanned questions could be asked (Robson, 2011). This element of the data collection supported the epistemological stance of exploration.

These questions were piloted by 3 assistant educational psychologists to ensure clarity and ease of understanding (Dörnyei, 2007; Hayes, 2000), and amended as appropriate, subject to feedback. **(Appendix Z: Semi-structured interview questions, p.308; Appendix AA Semi-structured interview prompts, p.309**).

3.7.3.3. Participant inclusion and recruitment

All participants completing the online questionnaire were asked if they were willing to participate in a semi-structured interview with the researcher by checking a YES or NO option on the Qualtrics survey.

29 participants checked the YES option. Using the classifying information, the 2 highest scoring participants and the 2 lowest scoring participants in terms of total SE score on the TASCA were invited for interview. Selection of participants for this element of the research was therefore purposive (Patton, 2002, Bryman, 2008) and homogeneous (Patton, 2002). Although this approach does not allow for statistical generalisation, it is commonly used when the selection of participants is based on a known common characteristic (McGuirk & O'Neill, 2005; Patton, 2002).

The potential participants were invited by email to an interview at a time and place to suit. Confidentiality of data and anonymity was assured. In addition, participants were informed that they were free to withdraw from the study at any time **(Appendix BB: Email to participants for the semi-structured interview, p. 311)**.

Participants were required to read the consent form prior to the interview, explaining purpose and content, their right to withdraw from the activity at any time without consequence, and anonymity within the publication of the results (Oppenheim, 1992) **(Appendix CC: Consent form - semi-structured interview, p. 312)**. Participants were assured that no harm would come to them as a result of their participation, and permission was gained to audio record the interview and for later use of the data, including agreement for the use of quotations in reporting.

During the interview rapport was established with the participants. Attention was paid to verbal and non-verbal cues (Hayes, 2000) in order that the participants felt comfortable in expressing their views and opinions. The guidelines provided by Kavanaugh and Ayres (1998) were borne in mind, namely to: 1) assess respondent behaviours during the study, 2) recognise

and encourage any coping strategies, 3) provide researcher-initiated strategies to minimise harm and 4) evaluate respondent characteristics that might influence the responses (Kavanaugh & Ayres, 1998, p. 93-95) in case of sensitive issues arising. The researcher followed advice to “listen more than to speak” (Robson, 2011, p. 282), minimise interruption and give as much time as necessary to elaborate (Dornyei, 2007). Time allowed for this task was therefore flexible with the key criteria being to gain a comprehensive contribution from each individual.

At the end of the semi-structured interview, the debrief form was provided **(Appendix DD: Debrief form – Semi-structured interview, p. 314).**

3.7.3.4. Validity and reliability

The approach adopted helped to identify the complexity around the construct of SE in relation to ASD for TAs. The goal was to develop an understanding of what was occurring, with the qualitative data providing a rich picture. It can therefore be described as a valid approach, but not as reliable as a purely quantitative approach - replication is therefore acknowledged as a challenge.

Golafshani (2003) contends that in the same way triangulation is used in quantitative research to test reliability and validity, it can also be used to maximise validity when using qualitative approaches. The researcher anticipated that a range of approaches to explore the research area would add validity to the study.

As indicated above, vigilance against bias and distortion was required in analysing the qualitative data (Hayes, 2000) and borne in mind by the researcher at all stages of the process.

3.8. Chapter summary

Within this chapter is stated the purpose of the research, and the research orientation or epistemology. The methods of data collection which were selected to address the research questions are outlined for all phases of the study, and are in line with a pragmatic position. The mixed methods design is described, with detail provided in relation to both the qualitative and the quantitative aspects of the study, and the analytical strategies employed. The following chapter presents the findings of this study.

Chapter 4 - Results

4.1. Introduction

This chapter presents the key qualitative and quantitative findings from the research study. Thematic analysis of the focus group data is presented. This is followed by the findings from the TASCA questionnaire which examines reported SE of TAs. The analysis of the SSIs is then presented using thematic analysis in relation to Bandura's 4 sources of SE. Discussion of these results takes place in Chapter 5.

4.2. Phase 1 : What constructs do TAs report in relation to their performance of their role in supporting pupils with ASD?

An opt-in sample of 8 participants, one male and 7 female, took part in the focus group interview. Demographic data was gathered **(Appendix F: Demographic data form for focus group participants, p. 245)**, and the data analysed **(Appendix G: Demographic data for focus group participants, p. 247**).

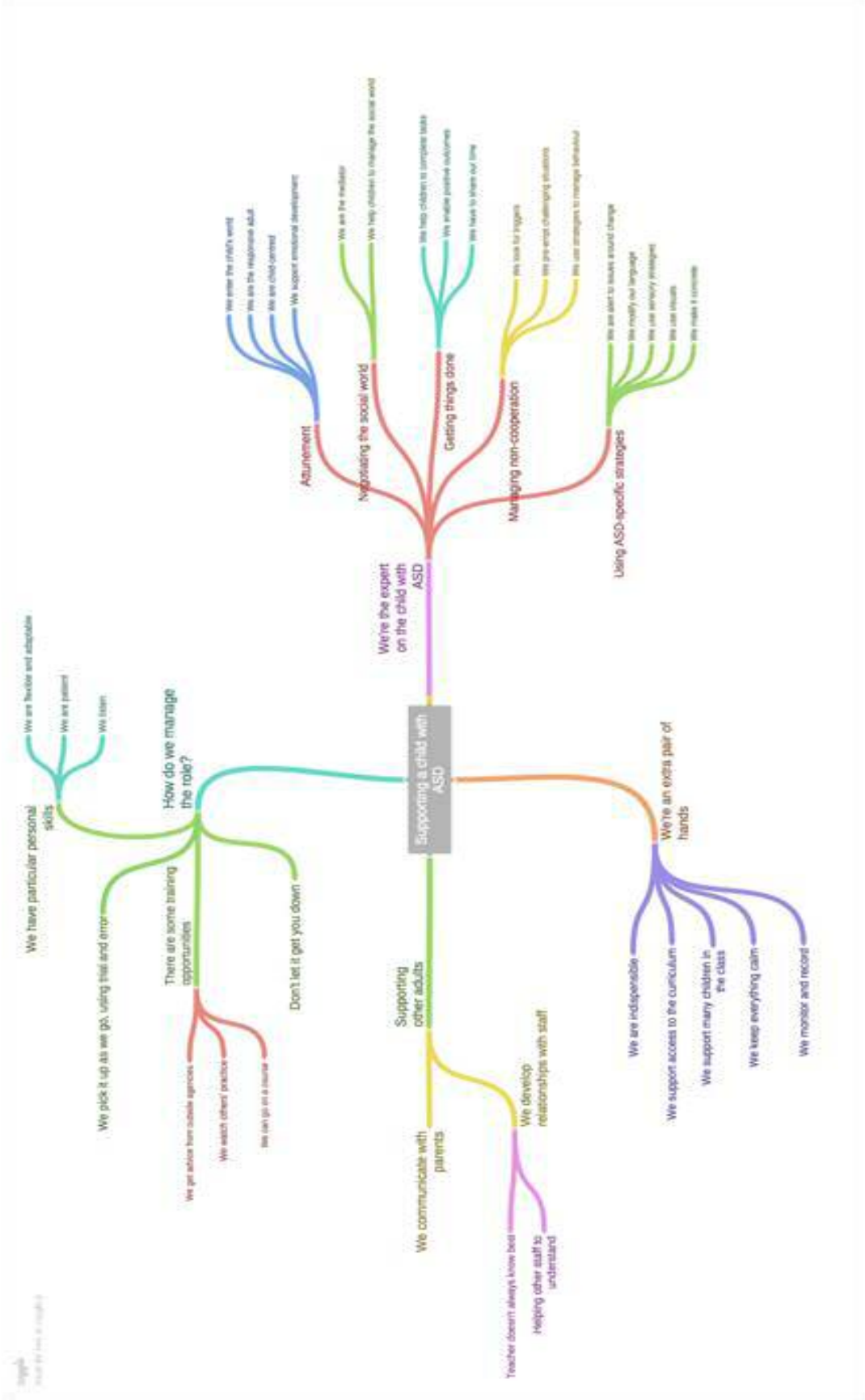
The age range of participants was from 25-30 years to 51-60 years, with the median age range being 41-50 years. Educational qualifications ranged from A-level/ NVQ3 (Level 3) to Degree (Level 6). Number of years' experience as a TA ranged from 0-20 years.

7 TAs worked with children who had a statement of SEN or EHC Plan, and one with a child at SEN Support level. All TAs except one had protected liaison time with the class teacher. All felt that work demands were clear, and that their work was valued.

As outlined within Chapter 3, thematic analysis of the focus group data was carried out with the purpose of identifying themes leading to the development of a questionnaire. Analysis of focus group data is complex due to the significant amount of data gained (Carey & Smith, 1994), therefore the depth in which this data is presented is necessarily abridged. Further quotes are thus provided within the appendices **(Appendix N: Thematic analysis of focus group data – further exemplars, p. 258).**

Thematic analysis of the focus group discussion led to over 50 codes being generated. These were arranged into four overarching themes. The TA voice was utilised to label these themes as follows: “We’re the expert on the child with ASD”; “We’re an extra pair of hands”; “Supporting other adults”; and “How do we manage the role?” Each overarching theme with associated themes and subthemes was then explored in turn, with analytic claims supported by quotations within the narrative.

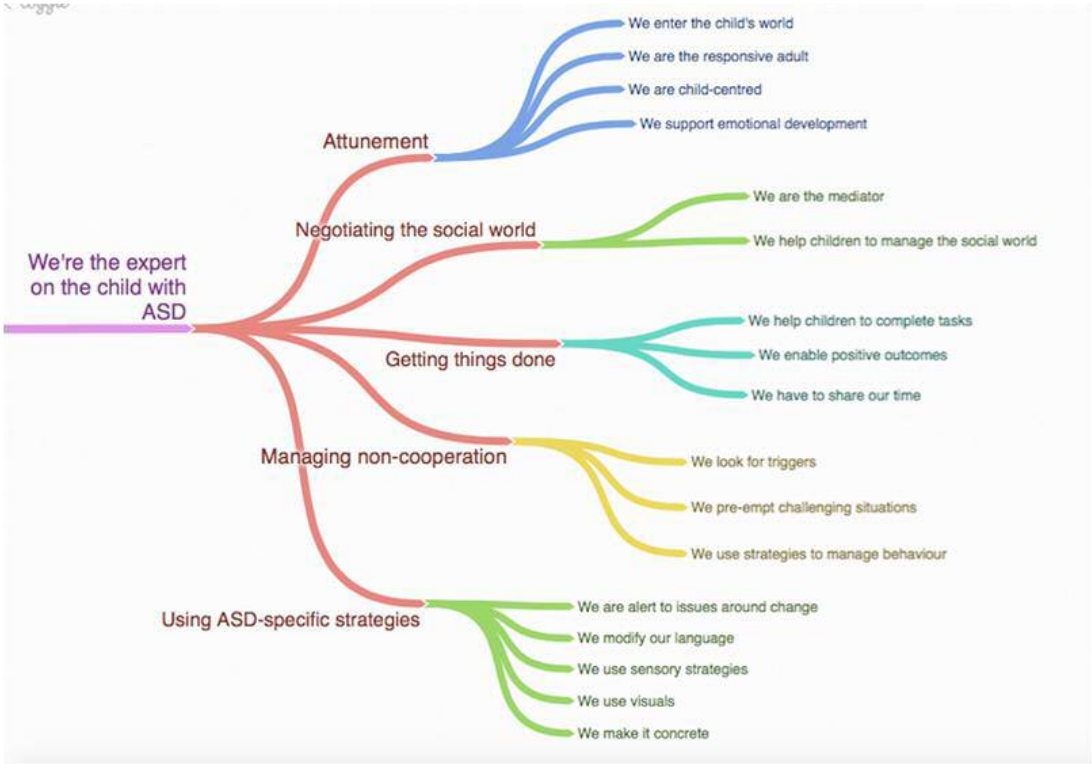
Figure 1: Overarching themes from thematic analysis of focus group data



4.2.1. Overarching theme 1: We're the expert on the child with ASD.

The TA perception of the role clearly emerged as a responsive, attuned individual who understands and appreciates the needs that the children they support bring to the school context. Within this overarching theme, a number of themes emerged.

Figure 2. Themes and subthemes within overarching theme 1



4.2.1.1. Theme 1.1: Attunement

TAs attending the focus group perceived themselves to be highly attuned to the needs of the child with ASD. This theme encapsulated a range of additional subthemes.

4.2.1.1.1. Subtheme 1.1(a): We enter the child's world

TAs clearly found value in getting to know and share the child's interests in order to find a "way in" to enable the child to settle into the school day, and

thus be in a position to access task demands. There was much agreement within the group, with the perspective of TA1, exemplifying this theme: "*If you, you forge a relationship with the child and find what's in common, like she liked Minecraft and things, so I could talk to her about that and it was an instant 'get out of jail free' card".*

4.2.1.1.2. Subtheme 1.1(b): We are the responsive adult

TAs viewed themselves as the adult within the school most responsive to the quirks of individual pupils and thus able to support them to feel less anxious and in a position to learn most effectively. There was a high level of agreement between TAs that they were in a prime position to know and understand the child best, given the more individual level of focus they were able to offer:

TA1: *"So it was being able to identify things that made her feel comfortable, and use those to sort of, I suppose, manage her moods and manage the situation in the classroom."* TA5: *"On the same wavelength."* TA1*: On the same page."*

4.2.1.1.3. Subtheme 1.1(c): We are child-centred

All TAs demonstrated that they had developed close and supportive relationships with the pupil with ASD, and explained that this was central to their ability to manage the task of supporting the child effectively: TA5: "*I think it's definitely to listen to them and build up a really good relationship.* TA6*: You've got to build a trust".* Because a positive relationship was the foundation,TA1 noted that even when there were difficulties, it was important not to: "*dwell on what's happened the day before…. its finished, it's done, move on.*" TA3 described herself as being "tuned in… you know." which enabled her to work effectively with the pupil.

4.2.1.1.4. Subtheme 1.1(d): We support emotional development

It appeared that TAs had a degree of understanding of the support role in terms of accessing and completing tasks, however, the level of emotional support that the child required was a surprise to a number of staff, as exemplified by TA2: *"I underestimated the degree of emotional support..... and being part of school in all the ways a child is part of school".*

4.2.1.2. Theme 1.2: Negotiating the social world

TAs strongly conveyed their view that they were best placed to develop particular areas of competency for children with ASD – in this case, the child's ability to negotiate the social world.

4.2.1.2.1. Subtheme 1.2(a): We are the mediator

A particular area identified was that of mediation – both between the teacher or other adults and the child, and between pupils. TAs expressed their ability to interpret on behalf of both child and teacher/adult to ensure that there was clarity for both: TA1: *"… often you had to mediate between them (the pupil and the teacher)".* TA5: *"You're mediators between the children as well".*

4.2.1.2.2. Subtheme 1.2(b): We help children to manage the social world

TAs further discussed their role in helping children to communicate and interact with each other, both within and outside the classroom, using structured as well as naturalistic opportunities for intervention: TA2*: "I find my focus is actually lot on friendships and joining in, self-esteem … not just the learning".* TA6 observed*: "I have done programmes for social skills, run little groups.*

TAs are proactive in creating opportunities to supporting the development of communication skills beyond the school context. This is effectively exemplified by TA5's comments: *"We take ours out to go to the park and … buy drinks, or food or whatever … so that we can see who's chatting and*

who's not, what they talk about, and encourage them to talk about things…..They… just chat amongst themselves and stuff, and initially some of them when they come in don't talk at all, … now we're having to keep them quiet!"

4.2.1.3. Theme 1.3: Getting things done

4.2.1.3.1. Subtheme 1.3(a): We help children to complete tasks

A key aspect of the role identified by TAs is supporting the child to achieve within the curriculum and as part of the class: TA1*: "I mean, we had great success with all these children, getting them involved with everything, in one way or another."*

4.2.1.3.2. Subtheme 1.3(b): We enable positive outcomes

TAs expressed that they clearly know when a task will be unmanageable for the child, and felt that they had the skills required to differentiate appropriately despite this level of planning being the teacher's responsibility: TA1*: "It would normally be differentiated but sometimes when you get to the lesson of course you realise actually that what's been planned isn't going to work."* TAs were proactive in analysing task and expectations to ensure that the child could be successful in achieving a positive outcome.

4.2.1.3.3. Subtheme 1.3(c): We have to share our time

Challenges were identified by TAs in managing the competing demands of others within the classroom. Because of the close relationship between adult and pupil, and perhaps the additional inflexibility of a child with needs in relation to ASD, sharing time was mentioned a number of times as being an issue. TA2 noted*: "Admittedly, there's nothing you can do about it if they're all on the same table, but that's very hard when you've got somebody who doesn't want to share your attention, and 3 other kids who need your*

attention." She identified: *"It depends what the activity is … If I know it's something she's going to struggle with, I know that I'll just have to make myself not as available to everyone else because otherwise it would just be chaos."*

4.2.1.4. Theme 1.4: Managing non-cooperation

Behaviour management in its widest sense was the subject of much debate. Because of their physical and emotional proximity to the child, the TA could anticipate issues and use strategies to manage behavioural demands. Within this theme, a number of subthemes emerged.

4.2.1.4.1. Subtheme 1.4(a): We look for triggers

Because of their proximity to the child, TAs are in a prime position to closely monitor behaviour. This involves *"Watching for triggers."* (TA2) and then utilising strategies to improve behaviour. TA1 had clearly identified a trigger for the pupil he supported: "*she didn't like to lose…If she lost it was someone else cheating, and then she got very angry."*

4.2.1.4.2. Subtheme 1.4(b): We pre-empt challenging situations

It was seen as crucial to pre-empt situations that would cause distress to the child, and possible behavioural outbursts. TAs found ways to proactively meet the child's needs. In such a situation, TA2 noted: *"we quickly, you know, found a quiet corner for her, and actually now we don't need to be in a separate room."* An example was provided of the way in which the sensory demands and lack of structure during play times could be challenging for pupils, so TA1 explained: "*at playtimes, they can get very worked up, through noise and I think over-stimulation outside, so we used to bring them in for the last bit."*

4.2.1.4.3. Subtheme 1.4(c) We use strategies to manage behaviour

Some TAs struggled with knowing how to deal with inappropriate behaviour, both in terms of making the judgement about what *was* inappropriate, and in relation to how it might be managed. The level of physical and verbal challenge was described by TA6: "*the bit that gets you is that you're … stopping this child because he's running out shrieking and shouting."* On such occasions, next steps were not always clear: *"I found what was most difficult is when they have done something wrong, like when they're being naughty or something, how far do you go with the discipline?"* (TA1).

Despite this, there were strategies that were identified by the TAs. These included visual approaches: TA6: *"We have SOS cards",* and behavioural approaches: *"Quite often the computers were used, sort of as the carrot on the end of the stick… "* (TA1). Distraction seemed to be a strategy that many used effectively.

4.2.1.5. Theme 1.5: We use ASD-specific strategies

Despite little explicit training, TAs seemed to have come to an understanding of which approaches might work effectively with the pupil with ASD. Such strategies were used in a range of situations and for a range of purposes.

4.2.1.5.1. Subtheme 1.5(a): We are alert to issues around change

TAs are consistently supporting children to manage transition and unexpected change within the busy school environment. TA4 identified that they used *"social stories, I think they're really proud of them",* with TA6 explaining further*: "I took G for a PGL weekend, … I think they really do work because it's… like a security blanket." TA1 suggested: "It's … using these resources to pre-empt, throughout the day, anything that might cause (difficulty)".*

4.2.1.5.2. Subtheme 1.5(b): We modify our language

TAs knew the importance of modifying their language, and, as TA3 explains, *"Being very black and white".* Use of key words and repetition were recommended, in addition to TA7 identifying, "*You always say their name first, otherwise you're not talking to them…and what you say, it's as short as it can possibly be".*

4.2.1.5.3. Subtheme 1.5(c): We use sensory strategies

The TAs within the group varied in the degree to which they had considered the impact of sensory needs upon pupils they supported. Those with significant experience were able to offer examples to others: TA1: *"noise… so on the coach we had ear defenders".* TA2 noted the value of physical exercise, adding:*"They do lifting weights, and rolling up in blankets, marching round the school with a backpack full of weights".* To the amusement of some, TA3 explained: *"There was one little boy who liked to be restrained,… he loved it, and in the end we had a heavy medicine ball, and when he got a bit jumpy we used to roll on it, lean on it and roll it over him… and we thought if anyone came they would think, 'oh what are they doing?', and then he'd say 'okay I'm ready to write now!', and off he'd go!".* For a number of TAs, knowledge of sensory strategies was very limited, and no explicit consideration of this area of need had been made.

4.2.1.5.4. Subtheme 1.5(d): We use visuals

Using visual approaches to support learning and understanding was widely commented upon. TA1 provided*: "a keyring for the children so they had…little flashcards of what was going to happen each day."* All TAs used visuals with a shared understanding of their use and value.

4.2.1.5.5. Subtheme 1.5(e): We make it concrete

TAs identified the value in making activities concrete for the pupils. This might entail preparatory practice of a task within a similar context: *"Even to go to London, we had to go up and down the escalators … and practise pushing them to make them realise that when we were on the tube in London people are going to touch you and you've not got to hit them!"* (TA3), or might relate to making the abstract more comprehensible by relating it to something that the child can more readily understand: "*I looked at the teacher and I said "I can't do this", because it's not in the real world…. I'd actually like to get a laptop to show him pictures… in fact turn the picture off and just let him hear the noises*." (TA6).

4.2.2. Overarching theme 2: "We're an extra pair of hands".

This was a significant theme running through the data, A range of tasks were identified as being within the remit of the TA, with the TA being identified as a key resource within the classroom and school. TAs supported curricular access both for the allocated child and for others within the classroom who may have additional needs. They served to help the class to "tick along", smoothing tricky situations and enabling the teacher to get on with the job of teaching.

Figure 3. Themes within overarching theme 2

4.2.2.1. Theme 2.1: We are indispensable

TAs identified themselves as an indispensable resource for the classteacher, supporting activities such as transition into the setting: *"From bringing them in to school, even getting them in through the front door"* (TA4), to providing reassurance that the child with ASD was being supported so that the class teacher could focus on the other pupils: *"Because teacher has 30 other children to look after, you have one"* (TA6).

4.2.2.2. Theme 2.2: We support access to the curriculum

As above, a key focus for the TA was identified as supporting curricular access, with TA3 noting that she was: *"Trying to help the children access all that they can… to put things in place for them so that they can actually take part and access the curriculum because that is very difficult*:" TA2 explained: *"You're … the extra hours that the teachers don't have."* These comments and others identified issues in teacher/TA roles and responsibilities for devising and differentiating tasks for children with additional needs.

4.2.2.3. Theme 2.3: We support many children in the class

Not only did TAs support the designated child with ASD, but by virtue of being in the classroom or group, they often found themselves working with other pupils. As well as being "in the right place at the right time" they did see themselves as competent to take on this role. TA5 noted*: "Because, you kind of use your skills and what you know to try and do it... I think you are more attuned to see other children's little quirks".* TA2 added: *"I find it hard to focus on one child actually in the classroom, because there are always 2 or 3 others you keep your eye on because you know they need you."*

4.2.2.4. Theme 2.4: We keep everything calm

TAs viewed the teacher role as challenging and overstretched, with TA5 observing: "*She (the teacher) doesn't have time, when they've come in from a break and she's got to get on and teach her lesson, and someone's hiding under the table and screaming and crying, because something's just happened out in the playground",* thus the role was seen as occasionally managing classroom situations so that the teacher was able to get on with the job of teaching the class.

Being "one step ahead of the game" was a sentiment that was reiterated on a number of occasions during the focus group interview. This was exemplified during a conversation where TA2 explained that the TA needed to be*: "one step ahead if you can. Watching for triggers"* TA1*: "Anything that could distract from whatever the problem was"* TA5*: "Yes"* TA2*: "Absolutely!"* In this way, TAs were able to proactively employ strategies to maintain calm within the classroom

4.2.2.5. Theme 2.5: We monitor and record

An important part of the TA role was identified as monitoring and recording pupil progress. This might be for the teacher and in relation to IEP targets:

TA5*: "I record everything that I've done…I…have another form that I just do quickly, against his targets and against his IEP as well, to see how he's going,"* or in the form of handover logs and notes, with TA2: explaining: *"we have a handover book because I'm in a job-share and we have to keep an eye on the behaviours of the day, and actually tiny little things that you think are insignificant you read a few weeks later and you think - there's a pattern emerging … such a useful tool".*

Liaison with other staff was seen as an important part of the role, whether face-to face: *"I go and see the SENCO regularly and tell her what's gone on … and the teacher obviously, I keep him in the know"* (TA6), or via shared notes: " *I put it altogether in a file and collate (it) and then hand it over to the SENCo"* (TA5).

4.2.3. Overarching theme 3: Supporting other adults.

This theme identifies the ways in which TAs feel that they provide an effective support for the child via their relationships with other adults, including the parents/carers and school staff. Although the role is often supportive, there are tensions in some of these relationships.

Figure 4: Themes and subthemes within overarching theme 3

4.2.3.1. Theme 3.1: We communicate with parents

TAs are in a unique position to see the child within a range of situations and to monitor their response to different demands throughout the school day. Maintaining links with parents is seen as an important opportunity to share this knowledge: "*I write a home-school communication book. It goes home to mum so that she know what is going on, what hasn't gone well, who he's played with and what's happened at break times." (TA5).* Additionally a specific focus might be required: *"I also have a worry book … which comes in and then I write in it..and then it goes home." (TA3).*

TAs did not appear to be following specific guidance in relation to their interactions with parents, and as with other areas of the role discussed within the focus group, interaction was often on an ad hoc basis. The worry book appeared to be a more formalised arrangement for TA3.

4.2.3.2. Theme 3.2: We develop relationships with staff

Relationships with wider school staff were noted by most of the participants to be challenging on occasion. Tensions were identified, with TAs explaining that they knew the child intimately and could anticipate when issues might arise, in contrast to the teaching or lunchtime staff who, by virtue of their roles, were not as familiar with the needs of each individual child.

4.2.3.2.1. Subtheme 3.2(a): Teacher doesn't always know best

Within this theme, the view that the TA often knows the pupil better than the teacher was expressed on a number of occasions, with TA4 noting: "*I found it very surprising how little the teachers seem to be aware of how to deal with children with ASD*", and TA6 identifying*: "As a teacher she was a brilliant teacher, but actually had not come into contact very much with children like him so she sort of fell into every possible hole she could fall into"*. This could

lead to challenging interactions between adults within the setting. TA6 explained: "*We ended up not quite having an argument but we ended up disagreeing with each other… and they (teacher) know that you obviously know the child more than the teacher does".*

Because of their lack of detailed knowledge of the child, teachers could behave in ways which TAs deemed were not the most helpful: *"They, not necessarily raise their voice, but they use this voice which then sets the child up here and then they get cross because the child's up here and they say something and it just escalates and escalates…(*TA6*)".* This was an issue in relation to wider school staff too: "*and also that is the same school-wise as well, because there are an awful lot of other teachers and, TAs out in the playground that may not be aware of this child. Say something's happened recently and they didn't know maybe how to react to a child, and if say something had been written and everyone was aware of it, then this would never have happened". (TA5).*

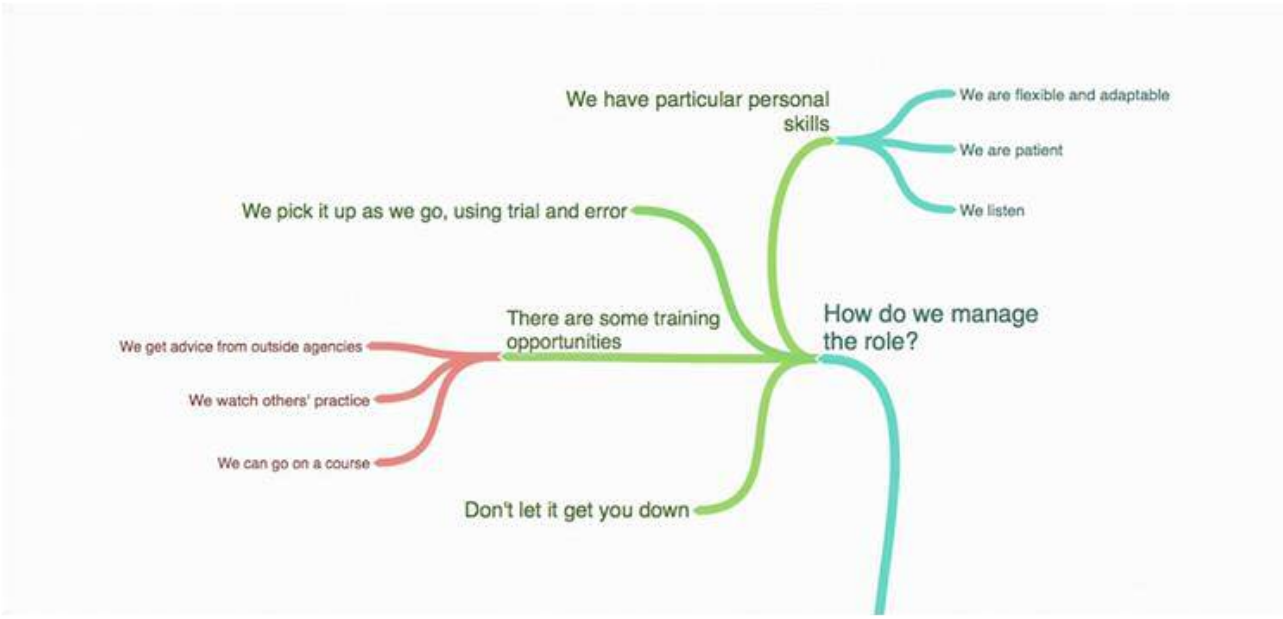
4.2.3.2.2. Subtheme 3.2(b): Helping other adults to understand

The proactive role that TAs might therefore take in order to support others' understanding was discussed. TAs appeared to make explicit attempts to suggest that other adults support the child to develop skills within the wider school context: *"Then they could come back to you, but it also gives other people access so they can learn from it as well."* (TA6). Communication with other staff was key: "*We talk a lot with the teacher…*
and I say to him, "actually that's not going to work", and he says "why?" and I say, "because it's going to set her off"." (TA2). This subtheme was further exemplified by TA5*: "There are instances I've had where he's done something out in the playground for example, and when I've unpicked it all, it's actually a misunderstanding from the other adult's point of view".*

4.2.4. Overarching theme 4: How do we manage the role?

This theme encompasses the TA's attempts to manage the role effectively despite a clearly identified lack of formal training opportunities. TAs rely upon their personal strengths and skills, and take a pragmatic approach, "having a go" and learning from their experiences.

Figure 5: Themes and subthemes within overarching theme 4



4.2.4.1. Theme 4.1: We have particular personal skills

The TA supporting a child with complex needs appeared to require, or benefit from, particular personal skills.

4.2.4.1.1. Subtheme 4.1(a): We are flexible and adaptable

TAs have a wide-ranging role within a challenging context. It is important that they are able to engage in **"***Thinking outside the box" (*TA6*)*. TA2 asserts that*: "being flexible*" is crucial. This is further exemplified by TA6: *"she read it - and went 'I'm not doing that' and put it away so I thought 'okay'… I thought 'oh, we'll go down that path some other time'."*

TAs identified that they needed to be adaptable, and this might include having the insight and the skills to modify teacher planning for the lesson.

4.2.4.1.2. Subtheme 4.1(b): We are patient

A specific personal quality identified on a number of occasions was patience. With TA5 indicating this as a key quality *"You need patience",* with agreement from TA1*: "Yes patience".*

4.2.4.1.3. Subtheme 4.1(c): We listen

"Being a good listener" (TA5) was identified as central, in relation to both the child, and the adults, including parents and teachers. It was seen as key to gaining a clear understanding of the issues that might be impacting upon the child's ability to manage within the school context.

4.2.4.2. Theme 4.2: We pick it up as we go, using a trial and error approach

TA2 explained that she had not: *"had any reading or training or anything so it was being thrown in the deep end actually",* and this sentiment was very much echoed by others. Because of this, TAs seemed to pick up the skills as they went along, as exemplified by TA1: *I suppose everything, everything essentially that we know about these children has been picked up by observing them and working with them".* TAs were in agreement with TA4 who summarised; "*I needed a lot more support and training than probably I did have."*

TAs described the way in which they came to solutions taking a trial and error approach: TA7: *"I bought the book that they recommended so now we can have a look at that book and see what might work, … and it if doesn't work you can just move on to the next thing".* TA6 concurred, although it did not feel like a comfortable approach*: "all that we did was …always very much based on trial and error - that sounds awful."*

Using one's initiative in order to find solutions was clearly important. Within the context of getting tasks done, TA1 and 2 explained:

TA2: *"And all of a sudden you've got to find a solution"* .TA1*: "And more often than not you figure it out because it's …"* TA2*: "Yes".* TA1*: "Whether it's something to solve the problem, you don't ignore the problem, but you side-step the problem".*

TA3 provided an example which focused upon the way in which she had considered the impact of sensory issues upon literacy development:

"We worked out that one little boy couldn't write with his shoes on, so we had to take his shoes off, because … if you think about it now, you can feel your shoes, yes?" TA7*: "We had a boy who was distracted by his eyebrows, having said that…".All: laughter,* TA3*: "You can't shave his eyebrows off!"*

As can be seen, a robust sense of humour went hand in hand with the role.

4.2.4.3. Theme 4.3: There are some training opportunities

TAs are clearly concerned to carry out their roles effectively, and yet the knowledge and skills base this relies upon is often ad hoc and unsustained. A range of opportunities for developing skills were discussed.

4.2.4.5.1. Subtheme 4.3(a) Advice from outside agencies

Some TAs had been able to access specialist advice from outside professionals such as EPs or outreach staff from the ASD specialist school. This could variously be seen as helpful: *"They've got specialist knowledge … that can feed into your plan,"* (TA2), or as being at odds with pre-existing advice*: "You can use people from outside as well - and they tell you a different thing"* (TA3).

4.2.4.5.2. Subtheme 4.3(b): We watch others' practice

In addition to receiving explicit advice, TAs had found that watching others, including both TAs and teachers, could be a helpful way to develop their repertoire of skills exemplified by the exchange: TA3: "*A lot of it is actually watching them*." TA2: *"Observing*" ?: "*Yes."* ?: "*Observing them."* TA6: *"Watching them so, not just actually working with them but watching them so that you are seeing what they are doing."* In this way TAs were able to assess the needs of the pupil across a range of situations and gain a helpful holistic picture, one which was perhaps missing for the teacher who did not have such regular opportunities. Despite this, TA7 noted: "*Our class teacher though…she picks up on a lot of things and we bounce a lot of ideas off each other"*, demonstrating joint problem-solving which seemed helpful in guiding the TA in her work with the pupil.

4.2.4.5.3. Subtheme 4.3(c): We have training

For some staff, any sort of guidance would have been a bonus, with TA1 expressing: "*Just anything…what I didn't, still haven't had is any training working with children like her before, so … I mean just anything at the time that could have…whether that be books, courses, anything".* TA4 had received books to read over the summer prior to supporting a child, commenting*: "it wasn't ideal but at least it was awareness, something to help me get into his head, into the way he was thinking and seeing things."*

TA7 and TA5 had been able to attend specific training courses which were clearly found to be beneficial, with TA7 noting: "*I went to XX (specialist ASD school) …. on a sensory course which was really really helpful actually and you can spot all the things that they've spoken about"*, and TA5 expressing: " *I've been lucky enough to go on the trainings that I've wanted to go on … When I have been on a course they've been very beneficial".*

4.2.4.6. Theme 4.4: Don't let it get you down

A clear and substantial thread running throughout the focus group interview was the high emotional demand placed upon the TAs. TA2 shared her sentiments with the group: "*We weren't really being fully honest in how the job was making us feel, and I remember really clearly that we both reached a sort of crisis point with it"* , leading to discussion of the ways in which these could be managed. TA2 suggested: "*Don't take it too personally",* with TA5 agreeing*: "They don't mean it - it's just how they're feeling at the time".* TA6 noted that you *"Feel conflicted",* with TA5, in agreement with TA3, maintaining: "*You need a break sometimes".* TA5 continued*: "They need to learn to listen to the other adults",* which reinforced the view that the TA often felt alone with the responsibility of working with the pupil with ASD.

4.3. Devising the TASCA

The data from the focus group helped to identify the TA role in relation to those TAs who supported pupils with ASD. Questionnaire items were then drafted. These were based upon the ASSET (Ruble et al. 2013), in addition to the focus group data and in relation to the identified research examining TA roles and responsibilities and austism-specific competencies (**Appendix O: Item development for the TASCA, p. 270)**. The draft questionnaire was piloted, amended and disseminated as the TASCA online questionnaire.

4.4. Phase 2 : What self-efficacy ratings do TAs give in relation to supporting pupils with ASD?

Table 3: Completion rates for the TASCA

Started	In progress	Completed	% Drop-out
83	61	50	12.5%

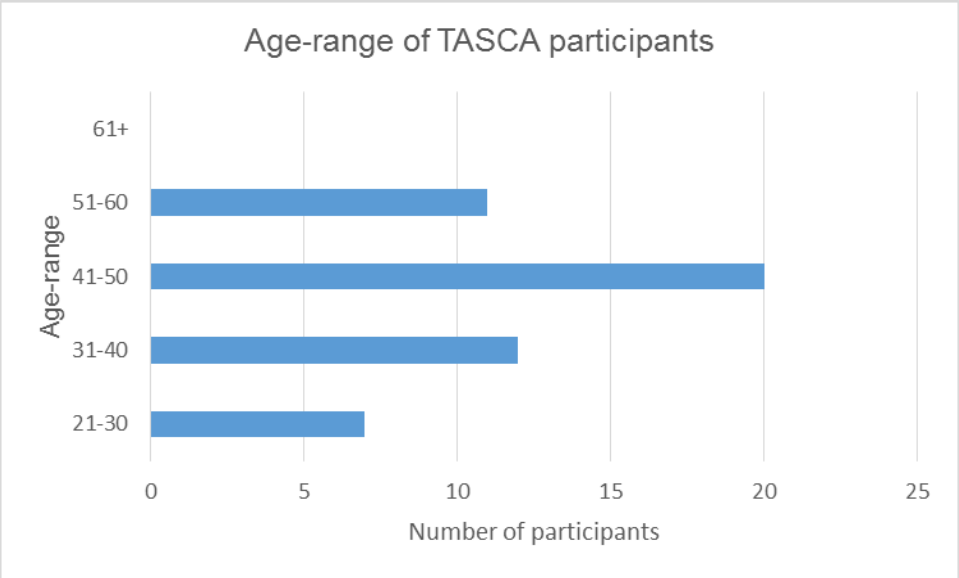
The Qualtrics online questionnaire was opened by 83 participants comprising 82 females and 1 male. 22 questionnaires were ceased before the first question with the participants electing not to provide consent. 50 questionnaires were completed, by 49 females and one male. A drop-out rate of 12.5% was registered.

For the 36 scaled questions assessing TA SE, 26 items gained 50 responses, 9 items gained 49 responses and 1 item gained 48 responses.

Table 4: Frequency of respondents in each age range completing the TASCA

Age	**21-30**	**31-40**	**41-50**	**51-60**	**60+**	**Total**
number	7 (14%)	12 (24%)	20 (40%)	11(22%)	0	50

Figure 6: Graph to show age-range of participants completing the TASCA



Participants completing the TASCA ranged from 21-30 years to 51-60 years. Most participants came within the range 41-50 years of age. No participants below 21 or beyond 60 years took part in this phase of the research.

4.4.1. Responses to non-scaled questions.

4.4.1.1. What is your highest level of education?

Table 5: Summary of level of qualification indicated by TASCA respondents

Level of qualification	**Level 1**	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Total
Number	0	6	13	3	1	14	0	47

https://www.gov.uk/what-different-qualification-levels-mean/overview

Qualifications in England, Wales and Northern Ireland are grouped into levels, from entry level (e.g., Entry level Functional Skills) and Level 1 (GCSE grades D-G) to Level 8 (e.g., Doctorate). The most commonly occurring levels cited were at Level 3 - equivalent to A and AS level and NVQ level 3, and at Level 6 - equivalent to Bachelor's degree and BTEC Advanced Professional Award. One respondent had completed part of a Masters degree.

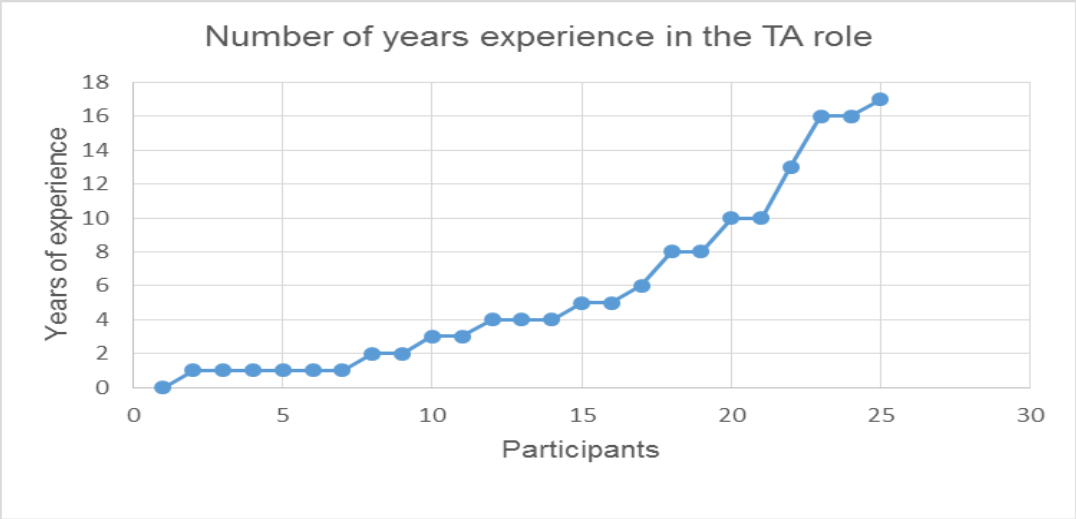
3 respondents provided non-standard answers to this question, including ASD training received (e.g., ASD training level 3), and Elklan (speech, language and communication training) levels (e.g., Elklan speech and language Level 3), and therefore, numbers within the table above do not add up to total number of questionnaires completed.

4.4.1.2. How many years' experience do you have as a TA?

Respondents to the TASCA had a wide range of experience, indicated to be between 0 and 20 years. 7 respondents had no full years or one full year's experience within the role. 14 respondents had 5 years or less experience. 4 respondents had a significant amount of experience as a TA, with 2 TAs

having 16 years experience, one having 17 years and one having 20 years experience. 25 TAs answered this question.

Figure 7: Scattergram to show number of years experience as a TA for those completing the TASCA



4.4.1.3. Have you attended ASD specific training? Please detail.

Table 6: Summary of ASD-specific training received by TAs completing the TASCA

ASD-specific training attended
In house training and initial guidance from SENCo. Also ELSA training.
Yes SENIP foundation degree. I have an ASD child so have 10 years of constant training and knowledge seeking with him. I have worked in a speech and language communication school which has 64 children all with ASD or other SEN requirements. I am training in Makaton also.
Early Bird Programme
(Local special school A) Sensory Processing Disorder training
Supporting ASD Children with social and communication difficulties
TEACCH week training.
Yes, (Local special school B) school and one with EP

ASD-specific training attended
In university I studied Ed Psych. and did most of my practical hours in behavioural therapy.
I attended a study sensory processing integration disorder programme and training.
I attend local ASD training offered to parents/carers of ASD children.
Yes, Numerous. Currently completing a years worth of training to qualify as Autism Lead.
AET Level 1, 2 and 3, EarlyBird Plus, Social Stories, Autism and Happiness, Intensive Interaction, Sensory Processing, Supporting Learning in the Classroom, Communcation for Non-Verbal and emerging, Social Understanding.
Early Bird course, ASD course at (local special school C). General training during my degree.
1 half day training led by local school for children with ASD, plus relevant training in previous role as Connexions Adviser.
Yes - a short course at (local special school B),
Yes - ASD training with (other borough provider).
My own son is ASD so I had input and training from the ASD nursery my son attended before I worked with children at schools. This meant that my understanding of the condition, although from a parent perspective, was very secure and skills learnt as a parent were transferable. Have had ongoing training during staff Inset days provided by an outstanding school for ASD . Many skills learnt on the job.
Earlybird Plus and Cygnets.
Autism in the Classroom, Autism Awareness, Pathological Demand Avoidance.
Yes through (local special school A) and (local special school C).
ASD training levels 1,2 3 MAPPA training (positive touch).
yes various training programmes.
3 day TEACCH training course at (local special school A).

Of the 50 responses to the TASCA, 23 participants provided information in relation to ASD-specific training received (above). 7 staff noted that they has received no ASD-specific training. 20 elected not to complete this question. It

is not known whether this means that they had had no training, or whether they had received training but elected not to provide a response.

As can be seen, a number of staff had been able to take advantage of the training offered by their local special schools within county. The TEACCH training is also offered by these settings. 4 TAs had attended the 8-week EarlyBird Plus (EB+) course where training takes place alongside parents/carers. Others had been able to draw on a range of related opportunities. ELSA (Emotional Literacy Support Assistant) training, offered by the EPs was listed once but mentioned twice in SSIs (below). 2 TAs indicated that they were parents of children with autism and had developed their skills experientially over a number of years.

4.4.1.4. Does the child you support have a statement of Special Educational Needs or an Education, Health and Care plan?

43 of the 49 (89.58%) participants who answered this question indicated that children being supported had a Statement of Special Educational Needs or Education Health and Care plan. 5 (10.42%) of the participants indicated that children being supported had no statement or plan. 1 respondent answered, “don’t know” to this question.

4.4.1.5. Are the expectations of the role clear?

36 respondents (72%) selected “Yes”, 13 respondents (26%) answered in the negative. 1 participant did not answer this question. The implications for this are explored in depth within the next chapter.

4.4.1.6. Would you be willing to take part in a short interview with the researcher at a time and a place to suit?

29 out of 49 (59.2%) participants who answered this question agreed to take part in an interview, and 20 (40.8%) indicated that they would not be willing

to do so. 1 participant declined to answer. This data is further examined below.

4.4.2. Examination of the TASCA questionnaire.

4.4.2.1. Item variance

Item variance was measured in order to determine which were the most discriminating items **(Appendix V: Minimum, maximum and variance of TASCA items, p. 294)** .

Table 7: Items showing the widest variance

Item	Variance
19. Help this pupil to deal with feelings of unfairness	808.10
35. Ask for emotional support for yourself	840.60
36. Tell someone how they could develop their knowledge and skills in supporting pupils with ASD	865.01

A scale item should have relatively high variance (DeVellis, 2012) so that it discriminates between different individuals in relation to different levels of the construct. The items above were identified as being highly discriminating.

4.4.2.2. Item means

The TASCA was assessed in relation to mean score per item. A mean (*M*) close to the centre of the scale, i.e., 50, is desirable, since means at the extremes denote an item that may fail to capture certain values of the construct **(Appendix V: Minimum, maximum and variance of TASCA items, p. 294)**.

4.4.2.3. Items scoring close to the mean

Table 8: Items scoring close to the mean

Item	Mean (*M*)
35. Ask for emotional support for yourself	57.60
36. Tell someone how they could develop their knowledge and skills in supporting pupils with ASD	64.30

These results would indicate that items such as 35 and 36 would be “ideal” (DeVellis, 2012), in further developing the TASCA scale.

4.4.2.4. Items scoring towards the extreme

Table 9: Items scoring towards the extreme

Item	Mean (*M*)
2. Describe how autism affects the pupil’s social and friendship skills	17.37
26. Modify my own language to support the pupil	88.98
33 Calm a pupil who is upset or angry	85.34
34. Ask for help from others to develop your practice	86.12

Generally, items with means near the extreme of the response range will have low variance in addition to low correlation with other items (DeVellis, 2012).

These results would indicate that the items identified above may fail to detect certain values of the construct of self-efficacy for TAs supporting children with ASD, and therefore would be omitted if the TASCA questionnaire were further developed.

However, from the perspective of targeting support for TAs, it is valuable to note which items have low means since these areas could fruitfully be a key focus for training and support. Likewise, knowing that over 86% of participants are able to ask for help to develop their practice may form the basis for future support arrangements.Such issues are further discussed within Chapter 5.

4.4.3. Statistical comparison of population means.

An Independent Samples t Test was used to determine whether there was a significant statistical difference in population means between the population who selected “Yes” to being willing to take part in a SSI (*n*=29) versus those who selected “No” (*n*=20) (4.3.1.6.). This was calculated using the Statistical Package for the Social Sciences (SPSS® 23.0.).

For 35 out of the 36 items of the TASCA, there was no statistically significant difference between the two conditions “Yes to interview” and “No to interview”.

Participants saying “No to interview” (*M* = 56.50, *SE* = 7.46) responded differently to those who answered “Yes to interview” (*M* = 75.07, *SE* = 4.25) for only one item: “help this pupil to deal with feelings of unfairness”, (p = >.05, df 47) indicating variability in the two conditions **(Appendix Y: Independent Samples Test results for all TASCA items, p. 303**).

4.4.4. Internal consistency reliability.

Reliability, concerned with the homogeneity of the 36 items within the TASCA, was calculated using Cronbach’s (1951) coefficient alpha in order to determine the consistency of the scale for determining TA’s perceived SE for supporting children with ASD.

Table 10: Internal consistency reliability using Cronbach's alpha.

Cronbach's Alpha	*N*
0.994	36

The TASCA questionnaire had a Cronbach Alpha of .994 denoting very high internal consistency reliability.

A reliable instrument will perform in consistent and predictable ways (DeVellis, 2012). This very high score indicates that scores obtained represent the true score of the variable, and minimally reflect extraneous factors, therefore the TASCA can be described as a reliable scale.

4.5. Phase 3: What self-efficacy beliefs do TAs report in relation to supporting pupils with ASD?

Bandura (1997) suggested calculation of a total efficacy score by summing the efficacy strength ratings of each questionnaire item, therefore, ratings from each of the TASCA questionnaire items were calculated to provide a total efficacy score for each participant. The 2 highest and the 2 lowest scoring participants (in terms of their total self-efficacy score) from those who agreed to take part, were invited to take part in an SSI. In this way, a purposive sample of 4 participants each working within the same local authority was identified.

Within the analysis, participants are identified as follows to aid understanding and to protect anonymity:
Low scoring TAs are anonymised and for ease of reference, referred to as Laura and Lisa.
Likewise, high scoring TAs are referred to as Hannah and Helen.

Table 11: Semi-structured interview participants – Years of experience and TASCA scores.

Participant	Years of experience	Total SE score	Mean score
Laura	16	2224	63.54
Lisa	16	2207	63.05
Hannah	7	3510	97.5
Helen	8	3522	97.83

The low scoring participants, Laura and Lisa, gained mean SE scores of 63.54 and 63.05 respectively. The high-scoring participants, Hannah and Helen scored much more highly with mean SE scores of 97.5 and 97.83 (maximum 100).

Although Lisa indicated on the TASCA questionnaire that she had 16 years of experience within the role, it transpired during interview that this experience had in fact been gained within a different, and more administrative role within the school.

Table 12: ASD-specific training identified by SSI participants.

Participant	ASD-specific training received
Laura	My own son is ASD so I had input and training from the ASD nursery my son attended before I worked with children at schools. This meant that my understanding of the condition, although from a parent perspective, was very secure and skills learnt as a parent were transferable. Have had ongoing training during staff Inset days provided by an outstanding school for ASD. Many skills learnt on the job.
Lisa	None
Hannah	EarlyBird course, ASD course at (special school). General training during my degree.

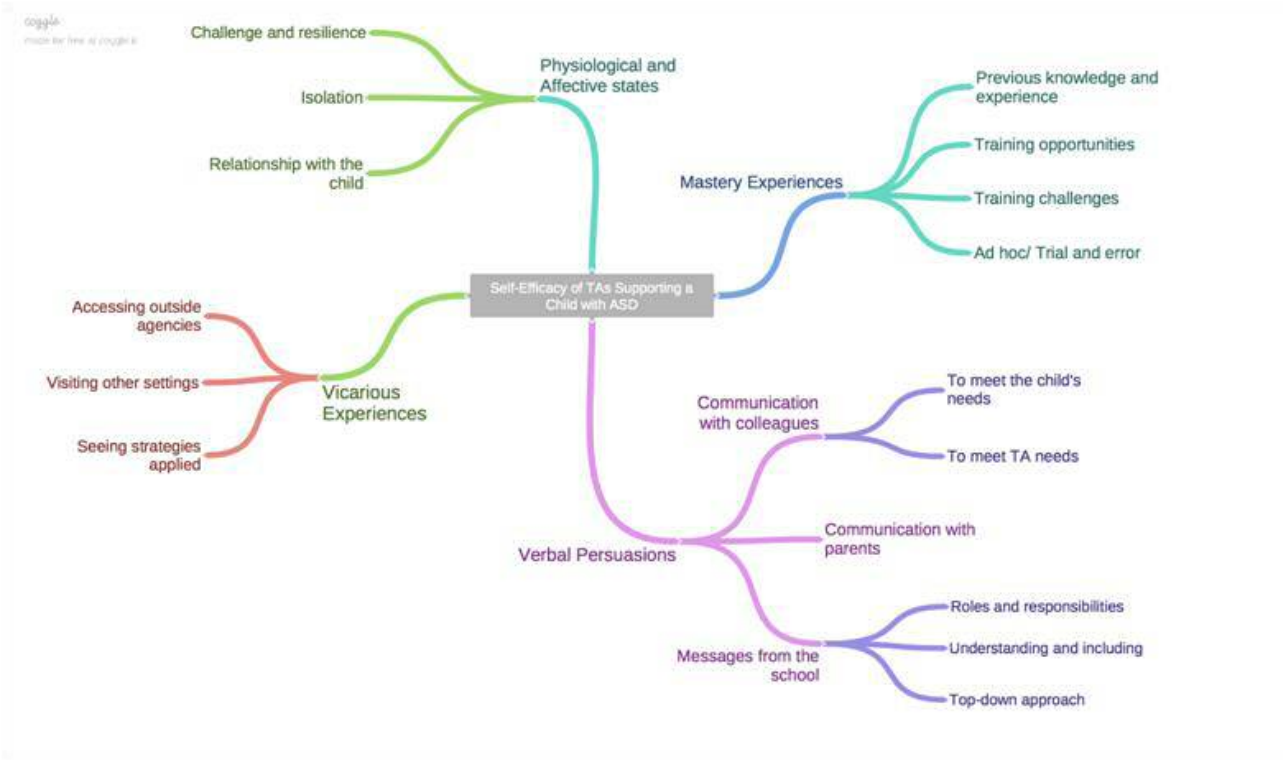
Helen	In house training and initial guidance from SENCo. Also ELSA training.

As indicated within the methodology, interviews were held within a location of the participants' own choosing - 3 within the school setting and one within the home. The SSI schedule was used as a guide to the discussion and audio recording of the sessions carried out **(Appendix Z: Semi-structured interview questions,p. 308, Appendix AA; Semi-structured interview prompts, p.309)**.

Transcriptions were analysed using the Braun and Clarke (2013) approach to thematic analysis, whereby codes contribute towards the creation of organised and coherent themes to provide an overall analysis. Overarching themes capture an idea which is encapsulated within a number of themes. Themes may or may not have subthemes.

It is theorised that beliefs about SE are instilled and strengthened in four principle ways: mastery experience, vicarious experience, verbal persuasion and physiological arousal (Bandura, 1986, 1997; Wood & Bandura, 1989) (see 2.5.3.). Thematic analysis of the data was thus carried out in relation to Bandura's four sources of SE in accordance with the Braun and Clarke (2013) guidance.

Figure 8: Overarching themes from thematic analysis of semi-structured interview data (Appendix EE: full page figure, p.316)



4.5.1. Overarching theme 1: Mastery experiences.

"Positive and negative experiences can influence the ability of an individual to perform a given task. If one has performed well at a task previously, he or she is more likely to feel competent and perform well at similarly associated task" (Bandura, 1977).

Theme 1 examines the impact of mastery experiences, or enactive performance attainments upon the self-efficacy of the TA supporting a child with ASD. Mastery is based upon direct and personal individual experiences, with successful experiences leading to greater feelings of self-efficacy (Bandura, 1997). Within this overarching theme, 4 themes emerged.

Figure 9: Themes within overarching theme 1

4.5.1.1. Theme 1: Previous knowledge and experience

This theme represents prior knowledge and skills that TAs have gained through hands-on opportunities, including parenting a child with additional needs, or through prior learning opportunities.

Two of the TAs mentioned expertise they had gained through parenting a child with additional needs. Laura reflected: "*I know my skills and my skill set, so that would probably be the high functioning autistic one that I can interact with*", mirroring the experiences she had shared with her own child. Lisa acknowledged the valuable experience she perceives her colleague to have gained: "*R.'s got her son, he's grown up now, but her son was that way, so she's got a lot more experience*".

Laura explained that in addition to her own personal experience she had been taken through a process of gradual induction to the role via a hands-on approach: "*you were given the easier ones to start with, and you learned the ropes that first year and then gradually it would get more difficult".*

TAs require tools for the role of supporting a child with ASD: "*I think I could do with the tools, just generally as part of the job*" (Laura). In order to access

skills and knowledge in the absence of formal training opportunities Helen notes: "*I'm always watching the TV, you know TV programmes come on about ASD and you go oh, I wonder what sort of techniques they've been using … and I've been onto the autism website and I've read various things and it's just helped me understand a little bit more*". Lisa similarly carries out research to support her in her role: "*I have looked at a few things, particularly online. I've always been happy to, because obviously it makes your own life easier if you look up things doesn't it, or try and find out.*" This activity has often been carried out within the TA's own time, and has not formed part of any school or wider local authority offer of support.

Both high and low scoring TAs reflected at length on the learning they had gained through working with the pupil, coming to an understanding of strategies through a process of "having a go" and seeing what worked. Unsurprisingly, Lisa felt most lacking in terms of experience, since she had recently moved from a different post within the school.

4.5.1.2. Theme 2: Training - opportunities

All TAs explicitly referred to training opportunities as being key for those carrying out the role. Training might be provided by staff within the school, or by external agencies offering training to the setting or countywide.

Hannah saw herself as lucky to have: "*done quite a lot of courses and quite a lot of training,"* which shifted her understanding of the needs of children with ASD*: "I was sent on the EarlyBird course, and that was absolutely brilliant. it just gave me so many strategies*". Such opportunities impacted positively upon her ability to reflect upon, and modify her performance: "*if it goes wrong then I would try and think, okay let me learn what was the trigger there, what happened*." Similarly, The ELSA course being rolled out across the county was specifically mentioned as being: "*a good starter*" for those who "*hadn't come into contact with anybody with ASD*" (Helen).

Helen had not attended additional ASD-specific courses, but described a model in which the SENCO: "*would give us tips to start with…she was able to feed the strategies down … we do it again on inset days, but she then uses the expertise of the people she has in school to present things*". This appeared to represent a more embedded model of practice within the school.

The low-scoring participants, Laura and Lisa, seemed to feel less confident in the opportunities available. Laura acknowledged: "*we do have training during the year*", but explained: "*sometimes we have half an hour training at the beginning of the week, but it's never enough…we don't have any external training. We're not sent off, I haven't been on a course in the longest time*".

Despite extensive experience as a parent and within the role, Laura explained: "*even though I've been doing it for a long time, I could do with a catch up and a brush-up, and a reminder of things. Because you get stuck in a way of doing things.*" She identified that she was a hands-on learner, and commented: "*I don't think I would learn very well online*", noting: "*the application … is a big thing*". The possible reasons for Laura's possibly surprising low SE score is discussed within Chapter 5.

4.5.1.3. Theme 3: Training - challenges

Both high and low scoring TAs outlined the challenges facing the school as an organisation when TA training was sought. Laura explained: "*if you're part time, or even if you're full time, you'll have to go on a training session and they will have to pay for someone to cover you*". Such challenges were often expressed as the reason TAs were unable to attend ASD-specific courses such as EB+ and Cygnets. An additional challenge was the heavy reliance upon the TA knowledge of, and relationship with the child, which meant that the school perceived that they could not be released from the role: "*I think sometimes it's a problem, getting people out [of school.] Because if you're the only person who can be there with the child*" (Hannah).

Laura asserted: "*If you're not investing (in staff training), you're on the back foot"*, and made suggestions regarding next steps: "*more communication, more training, more time out to train, maybe in the summer holidays*".

4.5.1.4. Theme 4: Ad hoc / trial and error

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The ad hoc nature of skill and knowledge development in relation to support for the child with ASD was expressed by all participants, despite SE scores. Lisa explained that she is perceived as an expert: "*But you're not, because you often fall into it"*. Learning on the job was seen as the default position, in which: " *just doing the job is obviously the best thing to learn"*, and skills and strategies used are: *"things I've just picked up*" (Lisa).

Laura's experience mirrored that of Lisa: "*you learnt by osmosis"*. She described the demands within her school: "*Right, think on your feet….so it's this floppy flappy floppy, nothing specific… we need some more guidance*".

Despite scoring highly on the TASCA, Helen noted: "*I've worked mainly from intuition*". She clearly identified that she needed to: "*hear and speak and do*" in order to develop the ability to support a child with ASD successfully, mirroring Laura's comments (above).

Hannah was able to reflect upon her skill levels on starting within the TA role: "*When I started working in a school, I was working with an autistic child and I didn't really know many strategies I just knew about autism and the impairments of it"*. In fact this staff member was probably at an advantage in comparison to colleagues in that she had studied Psychology at degree level and did have an understanding of the challenges faced by children with ASD in school and within the wider community. It is interesting that despite this knowledge she still felt unprepared. Again, such issues are examined further within Chapter 5.

The feeling that all TAs held of being unprepared and inadequately skilled may well have contributed to negative physiological and affective states as identified below (4.4.4.)

4.5.2. Overarching theme 2: Vicarious experiences.

People can develop a high or low self-efficacy vicariously through other people's performances. A person can watch another perform and then compare their own competence with the other individual's competence" (Bandura, 1977).

This theme examines the impact of vicarious experience upon the self-efficacy of the TA supporting a child with ASD. This theme includes indirect sources of learning such as listening to others and observation, rather than direct, hands-on, instruction.

Figure 10: Themes within overarching theme 2

4.5.2.1. Theme 2.1: Accessing outside agencies

All 4 of the TAs interviewed referred to the opportunities provided by outside professionals visiting the school. These visits could provide an opportunity to

enhance understanding of the needs of the child and to learn specific strategies to support the child: "W*e do have XX people (ASD advisory staff) coming in and they will sometimes observe children and then speak with the TAs, give tips, advise*" (Hannah).

Face-to-face communication with the professionals was seen as valuable, and something that might impact positively upon practice: "*Sometimes I think it is nice if you have the TAs and the teachers together, because you're not just passing on information you've had it straight from the professional's mouth, so you might be more likely to give it a try*," (Laura).

Despite feeling that she had low SE in relation to the role, Laura felt a high level of interest, and perhaps some increased motivation after contact with advisory staff: "*Whenever (ASD Advisory staff) have come in, I've always found them incredibly fascinating, as much as anything, and it actually re-engages you with what you've got to do"*. She again mentions interest in relation to the Educational Psychologist visit: "*the Educational Psychologist was really good, he came in for ten minutes and picked up so much, and it was really interesting*".

Helen reflected upon the model of support provided by outside agencies in terms that might appear more negative: "*they come into the school, and they'll talk to the SENCO, but they haven't come in and talked to the whole school or anyone working with children, other than coming in to assess a child, and then you get to meet them*". How such contact – or lack of - might have impacted upon SE is explored within Chapter 5.

4.5.2.2. Theme 2.2: Visiting other settings

Some TAs interviewed had had the opportunity to visit, or expressed an interest in visiting specialist settings. Laura felt that: "*it might help if they (TAs) were allowed to go to other schools… with a unit to see what they do and what they have on a day to day, that might help. Because within a*

mainstream school you're kind of run by what's going on in the classroom, and you're trying to fit in around that … if we could go to another school and observe…..". Lisa reflected this view: "*Because it's just the little things that they do. I mean some things that they suggest you can't really do, because it's a mainstream school, but you can take ideas away from them*". Neither Hannah nor Helen identified such opportunities during the SSIs.

The lack of perceived specialist knowledge within a mainstream environment, and the availability of that within local specialist settings was thus seen as a valuable resource for staff. Visiting such resource bases might appear to be a way to increase SE.

4.5.2.3. Theme 2.3: Seeing strategies applied

Although not providing explicit or direct instruction as would be seen with a hands-on opportunity, the low scoring TAs in particular talked about the value for them in observing others' practice within their own settings. They took note of the ways in which their colleagues interacted with the pupils, and were able to determine approaches which were supportive and successful. Laura explained: "*you're looking around and you're seeing… just watching how they deal with some of our tricky ones, so it's observing*". Lisa similarly articulated: "*I think I could have done with a lot more of just watching her (fellow TA). I think (she's) most probably better at adapting it than me. I noticed today, because I was in there for a short while, and I thought, 'Oh, that's a good idea'."*

Laura described how she had observed a "*brilliant*" staff member who had informed her practice: *"I just fell in love with this lady… I felt that I learnt such a lot from watching her".*
Having felt that there was real value in the approach, she suggested that more formal opportunities should be provided: "*I think we need to do more of that, I think we need to be allowed to be given the time to go and observe … because I think if you watch someone in action - what do they do, what sort*

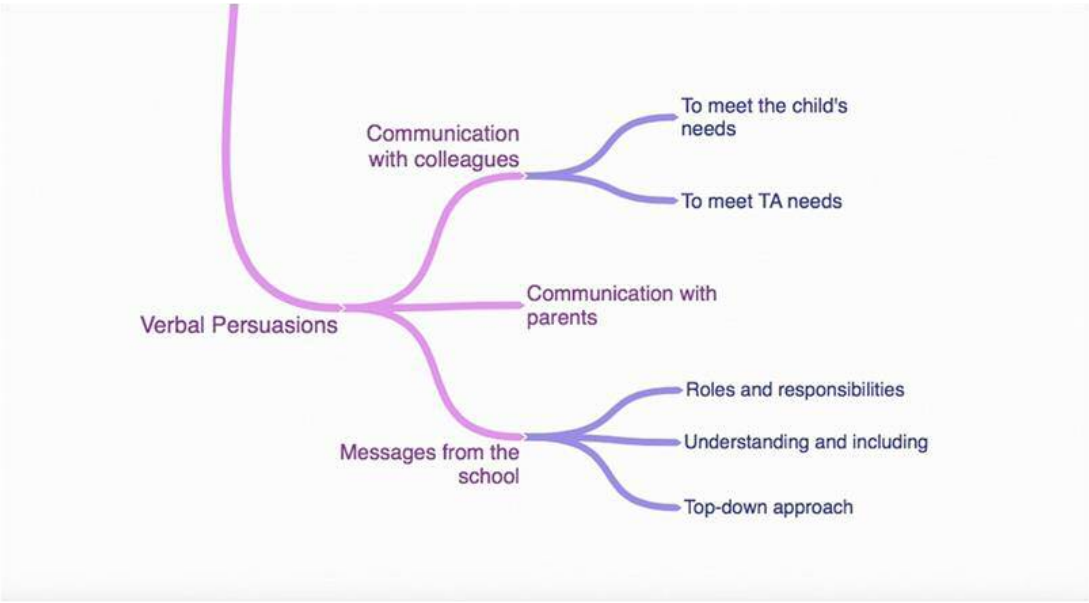
of things do they say, how do they say it, and how it works, then you can pick that up". Again, such comments have implications for practice in relation to TA skill development.

4.5.3. Overarching theme 3: Verbal persuasion.

"Self-efficacy is influenced by encouragement and discouragement pertaining to an individual's performance or ability to perform" (Redmond, 2010).

The contributions of verbal persuasion and social persuasion, based upon communication, feedback and discussion, emerged from analysis of the data. This led to the development of 3 themes and a number of associated subthemes.

Figure 11: Themes and subthemes within overarching theme 3



4.5.3.1. Theme 3.1: Communication with colleagues

4.5.3.1.1. Subtheme 3.1(a): To meet the child's needs

Issues around communication, both written and oral, within the complex system of the primary school were discussed by all participants. A key aspect related to sharing knowledge about the child, with the importance of a consistent approach being stressed. Hannah suggested using a: "*handover book, and knowing that you're both on exactly the same page…. so maybe some time built in for the TAs, where there is a handover period… this happened today, this went wrong or this went well, and why*". In this way the TA was able to continue to use successful strategies or to modify less successful approaches.

On a broader level, TAs reflected upon previous experience of supportive conversations amongst the wider staff team about children with additional needs. Helen represented a range of views when she reflected: "*there was a lot more free flow of conversation between staff and TAs, and you could have those conversations which you just don't have time for here*." Weekly meetings at the school had allowed discussion of individual children: " *TAs were made aware of the particular difficulties and how you should handle those children, which was amazing".* Laura concurred. She missed times when there had been: "*a lot of talks and a lot of meetings, so if a child was kicking off or whatever, it would be fed back and we'd all know how to deal with that child*." Such specific advice was highly valued.

Laura further noted that the TA knowledge and skills were not effectively utilised: "*We used to be part of the IEPs (Individual Education Plans) but we don't seem to be included in that now. And I think that's a shame, because we know the children really well*". It appeared that a TA perspective was not valued enough to be sought, and additionally, the opportunity for the TA to hear about management and strategies was lost.

The importance of receiving feedback was mentioned by 3 of the 4 participants, with Laura noting that in the past: "*We had a lot of feedback*". Although accepting Lisa's assertion that: "*everyone's got different ideas and opinions*" it felt important for TAs to be part of a conversation where the

needs of the child could be openly discussed in order to develop further understanding of the child and to inform strategies.

For both high and low scoring TAs, time appeared to be a key limiting factor, with insufficient time being available for this important activity to take place: "*In fact there isn't time to be able to discuss individual children"* (Helen).

4.5.3.1.2. Subtheme 3.1(b): To meet the TA's needs

TAs expressed that there was little opportunity to speak to teaching or management team staff about the challenges they faced. This was clearly voiced by Laura: "*the culture of communicating has been lost*."

TAs were able to make suggestions as to what might be supportive in terms of communication. Hannah suggested a way in which the emotional demands upon the TA working with a child with complex needs could be supported: "*Even if it was just once a month or once a term, just to have a sit down and have someone listen to you, 'oh I found that really difficult when such and such was doing this,' because obviously sometimes things do happen that do raise emotions*". Lisa had a similar suggestion, and would value the opportunity to problem-solve further: "*if it hasn't gone too well you think 'oh, was it me, and how I'm going to do it different next time*?'"

Both high and low scoring TAs suggested access to a mentoring approach: "*The perfect world would be, if you're coming in as a new person … you have a mentor*" (Helen). Lisa bemoaned the lack of extant opportunities but said: "*I definitely think something like a support group, where you do have that emotional support really, from other people doing the job at all different stages*" would be valuable. Hannah had accessed support opportunities, however, these felt ad hoc rather than planned: "*Well, I suppose you can always talk to each other, and the teachers, and if you've got a problem you can go and speak to the senior management*". Ironically, a meeting was available within this school for the TAs, but Hannah was unable to attend

since she supported one of the pupils others found tricky to manage: "*There's meetings once a week for TAs, although usually I don't really attend because I'm with my little boy.*"

Laura suggested: "*Regular catch up sessions with your line managers and even with your teachers"* would be a valuable way of supporting her within the role and further developing her skills.

4.5.3.2. Theme 3.2: Communication with parents

Communication with parents in order to hear about and share ways of supporting the child were valued by the TAs, however, experiences differed, and these did not appear to be related to whether TAs were high or low scoring on the TASCA.

The value of developing a positive working relationship so that this communication could take place was articulated by Laura: "*I tend to try and develop it if I can, a really good [relationship]".* These positive relationships could be enduring beyond the child being supported by the particular TA: "*One parent came up and gave me a massive big hug… We correspond, we get on really well, and she is … just the sort of parent you would want".* Conversely she had also experienced a parent whom she perceived*: "does nothing, absolutely nothing"* in terms of working in collaboration with the TA and found that this limited her success in knowing how to support the child effectively.

Helen was similarly enthusiastic about the benefits of working together and appeared to have had the opportunities to do so: "*whatever we put in we all did together and we did it at home and at school".* She acknowledged the emotional demands upon the family, and those of time, in determining whether effective communication took place, adding: "*I suppose it depends if you've got families who are really on board … and they want to put all the things in the place".*

The opportunity to talk to a parent to feedback progress and to seek direction could be limited to the school pick-up, which might be less than ideal: "*She comes in to the front, but then of course P.'s there, so you're a little bit limited"* (Lisa). When communication did occur, there could be a mismatch between the parental perspective on the needs of the child, and that of the TA: *"She (mum) is going down the line now, which me and R. (fellow TA) are not so sure on, of anxiety, but I'm not one hundred percent sure it's really that"* (Lisa).

When other staff members were the conduit for communication, there could be mixed messages. Lisa explained: *"I do find that the mum will tell R. something, and then the SENCo something, and me something, so you have to be a little bit careful because you can't always believe…".*

4.5.3.3. Theme 3.3: Messages from school

4.5.3.3.1. Subtheme 3.3(a): What are our roles and responsibilities?

All TAs commented upon the fact that roles and responsibilities in relation to providing the necessary planning for pupils with ASD were unclear. This was particularly well expressed by Laura: "*It gets a bit blurry who is in charge of who".*

There appeared to be a wide variability in relation to teacher ability to meet the needs of pupils with ASD, both between and within schools. This meant that the verbal persuasion could be perceived as negative in that the TA was asked to carry out activities that should perhaps have been the role of the class teacher. Lisa explained: "S*ome teachers in the mainstream are better at differentiating than others, and they don't always plan".* This TA felt confident to provide the differentiation needed: "*I just get the plans and then I differentiate them as needs be",* however, she appeared dissatisfied at the

ad hoc nature of the demands: "*Until I walk in I don't really know what I'm doing … and that isn't great."*

Her sentiments were echoed by others, with Laura sharing: *"I never feel like the mainstream teachers know our children really well… they leave them too much to us."* Again, an ad hoc approach which was entirely dependent on TA skills was the norm: *"we just tailor it as much as we can to the child.* Helen agreed*: "I think it depends on the teacher. First one I worked with in the school didn't want anything to do with the child, I think he felt he wasn't capable of dealing with the child, so he'd much prefer to leave it to us".* In addition to the lack of direction, there appeared to be very little opportunity for constructive feedback from the class teacher.

An exception was noted by Hannah. The teacher had communicated effectively with the TA, and she felt that she was in a better position to support the child effectively: *"I know what we're doing, and we get the planning, and I know her expectations for the child… once you know somebody's expectations for the child it's easier to plan what you're going to do"*. However, ultimately it seemed that often: "*it depends on the teacher you're working with, again. It's purely on a class by class basis"* (Helen).

4.5.3.3.2. Subtheme 3.3(b): Understanding children with ASD

A range of experiences were expressed by the participants in relation to this theme. The strongest message was that there was a: "*lack of understanding throughout the school,"* (Laura) in relation to support for children with ASD. Interaction between teachers and pupils was negatively impacted by this lack of understanding: "*sometimes teachers, the way they interact with them… they either patronise them, and actually they don't need patronising, or they just don't see something because they're being a bit hard of them".*
Helen similarly identified: "*unfortunately the teacher wasn't that intuitive, so often actually something he said or did would inflame the situation, and you'd then be back-pedalling to try and bring everything back again".*

Without the basic understanding it appears that appropriate messages, or verbal and social persuasions took place only on occasion. It followed that there was no rationale for teachers in using any particular strategies, or in the wider school staff implementing strategies consistently. For example, Lisa explained: "*there is so much language being thrown at them … sometimes they don't change the visual timetable on the board until too late".*

Even when the teacher had shared ideas and direction with the TA, this could actually reveal their lack of detailed understanding of the child's needs: "*you might have a target there, and then you might start working on it and realise actually, there are x amount of things that need to be done before we even get remotely close to that target" (Hannah).*

4.5.3.3.3. Subtheme 3.3(c): Including children with ASD

The inclusion agenda within school systems was explicitly identified by three of the four TAs. The ethos of the school appeared to affect whether or not the TA felt that they were a central and important member of the school community, or whether they were working on the sidelines with children whom others could feel unwilling or unable to support inclusively.

Hannah appeared to provide a mixed message: "*as we've moved on as a school … they're really into inclusion and understanding the special educational needs of children, and what's going to make them successful".* However, when discussing what occurred on a day-to-day basis she reflected: "*it is not very inclusive, but just I suppose that's just a feeling you can't help feeling if you're in a situation where things are going wrong".*

It appeared that there was a will to "get it right", however, staff were not yet at the desired level of skill and understanding. Moreover, this ability to successfully include children had declined, rather than improved, over time:

"*They're talking about the inclusivity of it, but I don't think it's as inclusive as it used to be"* (Laura).

4.5.3.3.4. Subtheme 3.3(d): A top-down approach

The senior leadership team (SLT) within the school sets the direction in terms of successfully including children with autistic spectrum needs. Both high and low scoring TAs mentioned the role of the head teacher, and particularly the SENCO, during SSIs. Hannah discussed the way in which the staff within the school might appreciate that children have a range of strengths and weaknesses that can be supported in different ways. She felt that rather than having the attitude: "*if they don't do it this way then that's it",* staff needed to appreciate that: *"There are a lot of ways people can learn, it's just not always the same way… I suppose it has probably come from the top down, from the senior management through to the teachers".*

As well as knowledge and skills, character was perceived as important by Laura:"*She (the head teacher) does have an understanding … she's very sweet, but I don't think she's got the force of nature which is required".* Lisa described her head teacher as: "*very supportive".* Additionally, the SENCo was seen as: *"extremely knowledgeable and that did filter down".* TAs did not explicitly reveal that they had had direct conversations regarding their skills with members of the senior leadership team.

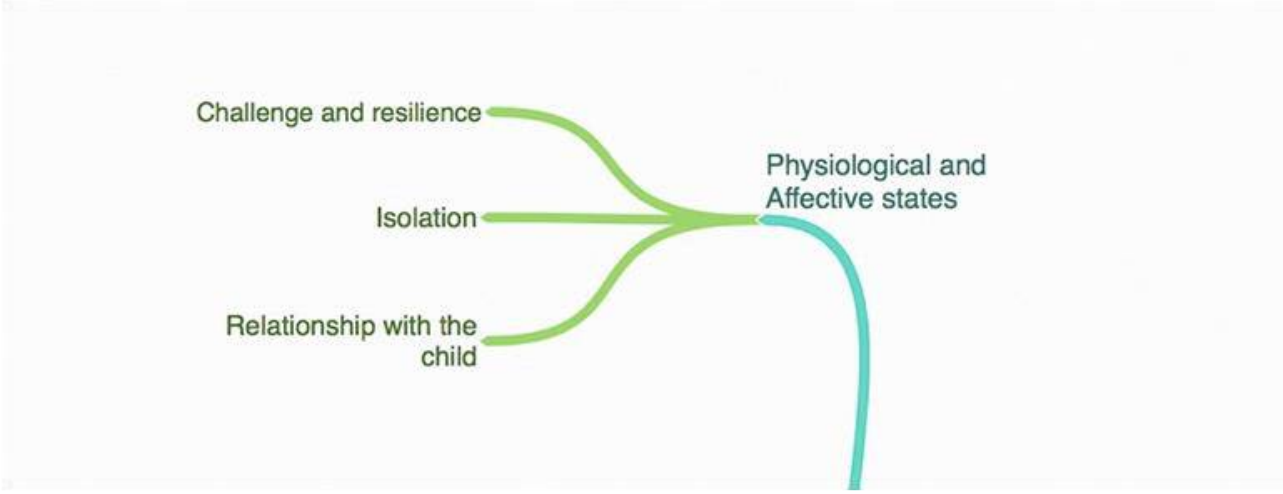
Some staff appeared inflexible: *"You do get the odd people who are like, 'this is the way it's always been, so thats how it's going to be"* and divisions within Helen's school were acknowldeged. This might imply that mixed messages are provided to the TA in terms of expectations, and thus the way in which their role is carried out.

4.5.4. Overarching theme 4: Physiological and affective states

People experience sensations from their body and how they perceive this emotional arousal influences their beliefs of efficacy (Bandura, 1977).

Bandura (1997) suggests that moods, emotions, physical reactions, and stress levels will influence how an individual feels about their personal abilities. The feelings experienced by TAs proved to be a significant theme within the data, with TAs appearing to carry a significant emotional load whilst attempting to meet the demands of the role. Three themes emerged within this overarching theme.

Figure 12: Themes within overarching theme 4



4.5.4.1. Theme 4.1: Challenge and resilience

All four of the interviewed TAs expressed the level of challenge they experienced within the role, irrespective of whether they were high or low scorers in terms of perceived SE.

The challenge might lay in knowing the pupil well enough to carry out the tasks expected by the teachers or leadership team, even with high SE for the role: "*I wouldn't feel confident going in and sitting with him now and doing a whole days work with him, because I … don't know him well enough*"

(Helen). Hannah similarly explained: "*I've not actually really worked with a one to one before so it can be a bit challenging*".

Conversely, the challenge might result from knowing more about the child and their presentation. Lisa explained that the role was "difficult", and elaborated: "*It's horrible … when he starts being really not nice, and aggressive*". Because of such inherent demands, she suggested: "*Sometimes I think you just need to walk away really. I think sometimes it's a situation where someone else steps in*".

The language used by TAs could be labelled as emotive, reflecting the level of anxiety about their ability to manage the child effectively. This is exemplified in particular by low scoring TAs Lisa and Laura: "*I've had quite a lot of really difficult and aggressive and violent children"* (Lisa). Laura describes the fact that the task can be "*scary*" but that "y*ou don't want to be seen like you can't, like you're failing*". Some anxiety may be in anticipation of challenge with Laura noting: "*Sometimes the new ones will come in with the hardest, I wouldn't want to touch them*".

Both high and low scoring TAs found that role affected them emotionally. Hannah explained: "*I remember one child who was really distraught, and had really lost it. And to see someone that far gone can be quite upsetting sometimes*". Additionally, others within a setting could find the child a threat: "*I don't feel threatened … I know other people who work with him do feel quite nervous sometimes*" (Hannah). As an experienced TA, Hannah had developed strategies to support the child and to manage her own affective responses: "*There have been times when I first started that I definitely felt anxious, but I suppose over time for me that has lessened*". She goes further, explaining: "*over time I've learnt more techniques and strategies, I've probably become more resilient and desensitised*". This appeared to be the result of her own previous mastery experiences, where she had taken a clear problem-solving approach to pupil needs and strategies, and learnt successful approaches.

The emotional demands were again clearly expressed, with Lisa exemplifying the challenges: "*for somebody new, it could be quite scary… so there are times like that when you just think, I could kill myself now*". Lisa had experienced similar feelings, adding: *"There's usually a glass of wine that night*". When asked whether she had a way within school of managing this, Lisa answered: "*No. Not really, no*", but did say: "*(support) would give you more confidence*".

Those who were identified as the most self-efficacious TAs appeared to have systems available within the school which meant that: "*if someone is really struggling or if someone says I really can't work with that person, then they will move them on to somebody else*" (Hannah). She elaborated further: "*The senior management, often the SENCo or the deputy, they will say, "do you want to play a game, or do something?", and then it will be time to do the work and you can think about what went wrong.*" It could be that these supportive systems contribute to her sense of SE. Such issues are explored further within Chapter 5.

4.5.4.2. Theme 4.2: Isolation

Some of the TAs appeared to spend a significant amount of time outside the classroom, and were therefore physically isolated from the everyday activities of the class. This was particularly exemplified by Hannah who appeared to have sole responsibility for her charge for most of the school day. Perhaps unsurprisingly, she stated: "*I think it can be difficult because it can be quite isolating*" and that: "*working in a corridor far away from the rest of the school from 8.45 to 12 0'clock with one adult… can be a bit boring for you*". She further expressed: "*that can be difficult for anyone I think…. sometimes as a job it can be quite isolating, and a little bit removed from the rest of school life*".

The low scoring TAs expressed similar concerns. Laura talked about the feelings of emotional as opposed to physical isolation: "*If you're a TA in a mainstream on your own, with a difficult child, it's quite an isolating feeling actually*". Lisa echoed this sentiment: "*you are a bit on a limb*".

Within this theme is the sense of support being scarce, with the TA having to draw upon their own resources to manage effectively. Helen explained how this can be dependent upon teacher skills as identified in 4.5.3.3. p, : "*First one I worked with in the school didn't want anything to do with the child, I think he felt he wasn't capable of dealing with the child, so he'd much prefer to leave it to us*". This appears to have a negative impact upon the TAs sense of working together collaboratively in the school setting.

4.5.4.3. Theme 4.3: Relationship with the child

The relationship with the child is at the core of the TA experience, with the school system either being more or less supportive of the TA.

During the interviews, it was noted that although children entered the setting as an unknown quantity, as explained by Laura: "*they come in with different experiences, different personal backgrounds, and all that baggage",* the more efficacious TAs were able to get to know and understand the child's needs: "*we do five minutes of learning, five minutes of free time, which obviously is quite a lot of free time to fill in the gaps. But he can only really cope with a short burst of learning, then a rest break".* Once a relationship is established, it is then possible for TAs to support the child in the best way that they can.

Helen sees the relationship as central: "*you need to establish the relationship first before you can move forward*". This relationship is important in maintaining the TA desire to continue working with a pupil presenting challenges : "*I really warmed to him, I loved him, but he was a very very difficult character to work with*" (Helen). The sentiment is echoed by Lisa, who indicates: "*He's very disruptive … he's quite a nice little character, he*

has his nasty side … We have a good relationship … because I don't think it would work otherwise".

Given the amount of time that Hannah spends on a one-to one basis with the pupil she supports, she describes an: "*unhealthy relationship",* explaining: *"even your own children you don't really spend that much time with that intensely, without saying, off you go for five minutes - it's constant*".

4.6. Chapter summary

A mixed methods design was used to explore the SE of TAs supporting children with ASD in mainstream primary schools. Specifically, three questions were asked, and examined via a mixed methods approach. In this chapter the findings have been presented. The qualitative data gained via a focus group generated 4 overarching themes, with associated themes and subthemes, which were utilised to develop items for a questionnaire. This questionnaire, the TASCA, was piloted and delivered to a purposive sample of TAs county-wide. The data were descriptively analysed via SPSS® 23.0., and the two highest and lowest scoring participants from the TASCA questionnaire invited to an SSI. Thematic analysis of the SSI data was used to further add to the exploration of SE which is the focus of the study.

The following chapter considers the findings and implications for EP practice.

Chapter 5 – Discussion

5.1. Introduction to the chapter

In this chapter key findings of the research are summarised in relation to the three research questions identified, and the existing research is explored in relation to the research findings. The strengths and limitations of the study are then examined for each phase of the research.

This research study aimed to explore the perceived self-efficacy (SE) of teaching assistants (TAs) in relation to supporting children with autism (ASD) in primary classrooms via three research questions, which resulted in 3 phases of research being carried out.

5.2. Key findings in relation to the research questions

5.2.1. Phase 1: What constructs do TAs report in relation to the performance of their role in supporting pupils with ASD?

As outlined within Chapter 3, the focus group provided rich data from which to identify key tasks for TAs supporting children with ASD within the primary phase. A number of key themes emerged.

The data reinforced the contention that the duties of the TA are vast and multifaceted (Farrell et al., 2000; Webster et al., 2010a; Warhurst, Nickson, Commander & Gilbert, 2014). TAs described themselves as the expert on the child with ASD (Webster & Blatchford, 2013). Central duties appeared to be supporting access to the curriculum via differentiating or developing tasks for the pupil. This reflected Wilson and Bedford's (2008) findings in which teachers expressed that since TAs were increasingly used to support children with SEN they were developing an expertise superior to their own.

The centrality of the relationship between the TA and the child was identified, with TAs feeling highly attuned to the pupil they supported; pupils were thus seen as individuals, with heterogeneous needs (Segall & Campbell, 2014).

On the basis of this knowledge, TAs were able to champion the child and re-frame incidents for other adults, perceiving themselves as mediators between pupils and staff, and a key player in pre-empting and/or dealing with challenging situations. The role of moderator between the mainstream context and the pupils was similarly identified within the examination of LSA (Learning Support Assistant) management, role and training carried out by Farrell et al. (1999).

Liaison with parents was perceived as an important part of the role, although this did not appear to be an explicitly negotiated task for any of the TAs. Rather, it appeared teacher and family dependent. In some cases there was a high level of liaison with clarity of expectation. In others, the TA had not met the parent at all. When it did take place, communication might be face-to-face or written. Effectiveness of interventions and approaches for pupils with ASD can depend upon the level of personalisation, thus, ensuring effective communication between school and family can be key (Witmer, Nasamran, Parikh, Schmitt & Clinton, 2015).

The role of supporting a pupil with ASD was clearly expressed as being a challenge for all staff. Additionally, relations between TAs and teachers could be strained by the differing perspectives on management and support required. TAs expressed frustration that teaching staff seemed lacking in their knowledge and skills to support children with ASD within the school. These perceptions reflect research which indicates that teachers can experience tensions in relation to pupils with ASD, feeling anxious and uncertain about their ability to successfully manage such pupils within the classroom (Barnard, Broach, Potter & Prior, 2002). Additionally, relationships between staff and such pupils can be poor, reflecting the difficulty in fostering

high-quality student–teacher relationships (Blacher, Howell, Lauderdale-Littin et al., 2014).

TAs within the group identified that they managed to carry out the role by drawing upon their own personal skills and experiences, with some opportunities for formal training, but in general by taking a trial and error approach to the task. Because of the way in which skills had been "picked up" by TAs over time, there were variable levels of knowledge of ASD-specific approaches, such as being alert to change, modifying language and using visual approaches. In particular, there was a lack of understanding of the possible impact of sensory demands for children with ASD from some group members, mirroring findings from Hess, Morrier, Heflin and Ivey (2008), who found that strategies for working with pupils with ASDs can vary, even within the same educational setting. The high emotional demands of the role emerged clearly from participants who could feel unsupported and insufficiently skilled to be holding such a demanding responsibility.

TAs saw themselves as an invaluable "extra pair of hands" within the classroom. They were able to monitor and support other children with additional needs on an informal basis, and help to resolve issues at the early stages in order to maintain a calm working atmosphere. Additionally, some were able to maintain records for the child by monitoring steps towards targets and completing home-school records.

5.2.2. Phase 2: What SE ratings do TAs give in relation to supporting children with ASD?

The TASCA presented 36 SE items encapsulating the key tasks and responsibilities for TAs supporting children with ASD, in order to assess SE for each participant. Although 83 participants initiated the online questionnaire, 22 did not proceed to consent. A drop-out rate of 12% was found, with 50 completing the questionnaire in full.

Demographic data identified the highest level of education of TA participants. A wide range of educational backgrounds was represented, with some TAs being identified as highly qualified, contrary to the findings of Blatchford et al. (2012), but in line with those of earlier studies (Jackson & Bedford, 2005, cited in Wilson & Bedford, 2008).

Almost half of the TASCA respondents had completed training that they felt was relevant to the role (4.3.1.3.). It is not possible to conclude that others had not received training, merely that they had not identified this by responding to the question. 43 out of 50 participants identified that they were supporting a child with a Statement of SEN or EHC plan. Many more children with ASD are supported at SEN Support level without a plan, yet TA staff supporting these children appeared not to have taken part in the questionnaire. It could be that the head teacher as gatekeeper had judged that TAs employed specifically within the role of support for a child with a Statement of SEN or EHC plan were required for the study, in which case, the cohort could have been specified more explicitly by the researcher in the communications with schools.

TAs were asked to identify how many years they have been working within the TA role. It was not felt appropriate to use this direct experience measure as a representation of mastery experience. It is plausible that the TAs had worked within a range of TA roles, each requiring particular skills. Thus, skills required in supporting a child with ASD might not have been required in a role such as providing direct literacy interventions, or support for a child with physical needs. Indeed this was explicitly stated by Laura who explained that the experience she had gained as parent to a child with high functioning autism had not helped her in supporting children with ASD who exhibited learning and behavioural challenges. One might conclude, therefore, that the skill set will vary according to individual need and not according to the label given to the child. This might have implications for the recruitment and training of TAs by settings.

Just over a quarter of participants felt that their role was unclear despite the majority being explicitly employed to support a child with ASD (4.3.1.4.). Since most of these children were subject to a Statement of SEN or an EHC plan, detailed assessment information and clear outcomes with associated strategies would have been available in paperwork and should form the basis for teacher and TA interventions (Special Educational Needs and Disability Code of Practice: 0 to 25 years, 2014). The clarity of the expectations for these children appeared to be lacking. Since participants were not asked how many hours per week they supported the ASD pupil, it could be that they had additional roles and responsibilities within the school that felt unclear. 72% of participants did feel that their role was clear – these responses could have been explored further by inviting a qualitative contribution to be submitted.

On statistical analysis, 3 of the items identified from the focus group appeared as the most discriminating between individuals in relation to different levels of the construct of SE (Item 19: Help this pupil to deal with feelings of unfairness; Item 35: Ask for emotional support for yourself; Item 36: Tell someone how they could develop their knowledge and skills in supporting pupils with ASD). Additionally, items 35 and 36 were identified as being “ideal” (DeVellis, 2012), since they scored close to the mean and thus captured a range of values of the construct. Thus, if the TASCA was viewed as a pilot questionnaire, these items would be particularly valuable to retain. This means that the items added as a result of the focus group task were particularly useful items, giving weight to the value of the process in devising the questionnaire. Conversely, items with means at the extreme were identified as being less valuable in identifying the range of values of the construct, and would be omitted in a revised tool.

Despite such statistical issues, these items were helpful in identifying areas of perceived high and low competence for TAs and an item such as confidence in relation to “describe how autism affects the pupil’s social and friendship skills” which gained a very low mean score might be helpful to

target within a training offer. The items gaining high mean scores such as "Modify my language to support the pupil" and "Calm a pupil who is upset or angry" were scored highly by all participants and therefore might be assumed to be embedded skills requiring less support for most staff.

A strength of the present study was the development of a measure of SE with high reliability, designed specifically for TAs supporting pupils with ASD. This tool could be used for pre and post intervention evaluation, and to identify patterns of need in relation to supporting pupils with ASD in particular cohorts. However, the TASCA was based on a small sample of TAs who supported children within the primary phase of education only.

5.2.3. Phase 3: What self-efficacy beliefs do TAs report in relation to supporting pupils with ASD?

The TAs attending semi-structured interviews were able to provide a rich picture in relation to their SE in supporting children with ASD. The data were analysed in relation to the four sources of SE identified by Bandura, namely: mastery experience, vicarious experience, verbal persuasion and affective and physiological states (Bandura, 1977, 1986, 1997) in order to explore how the sources of information impact on SE for these staff.

5.2.3.1. Mastery experiences

An individual requires two resources to perform any task - the requisite skills or knowledge, and SE (Bandura, 1997, 1989). Mastery experience is the most powerful source of SE (Bandura, 1977, 1986, 1997). From the SSIs, TAs expressed varying skill levels, gained from a range of sources.

5.2.3.1.1. Prior experience

Authentic mastery experiences are required for the TA to develop increased feelings of SE, and performing well at a task previously is more likely to help

the TA feel competent and perform well at a similar task in the future (Bandura, 1977).

The ad hoc nature of skill and knowledge development in relation to support for the child with ASD was expressed by all participants. The understanding of the child with ASD, and knowledge of specific strategies and interventions was not in place on commencing the role, although for Hannah and Helen some of this learning had taken place within the school, supported by own research and, in the case of Hannah, by previous experiences. A significant amount of data from all participants was gathered in relation to how TAs learned about the pupil and thus about approaches and strategies which might be successfully employed. Little appeared to have been gained via formal training opportunities. This picture mirrored Higgins' (2009) exploratory study of the impact of training on TA learning, behaviour and SE, where it was noted that TAs had no expectation of pre-service training.

Laura felt particularly lacking in her level of skill development. It appeared from her narrative response to the question; "have you attended ASD specific training?" that she had strong initial SE beliefs based upon her parental experiences. These were maintained and upheld when pupils she supported came within this level of challenge, and whilst she herself was supported by colleagues she held in high regard. However, these efficacy beliefs were undermined by the disconfirming experiences with children who had more complex needs than her own child (Bandura, 2006). This finding supports the domain-specific nature of the construct, and earlier research such as that by Ruble et al. (2010) who found no link between teacher experience and SE, suggesting that this was due to the heterogeneity of the ASD population. It appeared that Hannah had a more tenacious belief in her capabilities since she had previous mastery experiences with a highly challenging population (a secure adult mental health institution) and additionally had experienced formal learning and reflection opportunities via her psychology degree.

5.2.3.1.2. Training - opportunities

Where skills and knowledge were low, further training and development were sought. Specific courses such as the ELSA course and the EB+ course appeared to have led to an understanding of ASD-specific strategies that could be added to the TA repertoire.

Training provided by school staff had been available to Laura, Hannah and Helen, however, a decline in availability over time appeared to have been noted; indeed, Laura noted that she had identified attendance at ELSA training as an appraisal target every year. Such training, and the associated support, may well prove beneficial: in an analysis of the SE of TAs trained in the ELSA role, ELSAs were found to have higher SE than TAs who had not completed the training, and had protected time to both plan their ELSA work and to attend refresher-training events (Grahamslaw, 2010). ELSAs have also commented on being empowered by the training and supervision, and expressed that they felt much more valued in their new role within the school (Burton,Traill & Norgate, 2009).

Similarly, the EB+ course has received positive evaluations in terms of supporting both parents and professionals to develop skills and to work effectively together, improving the home-school partnership, developing skills and providing emotional support (Halpin, Pitt & Dodd, 2011; Clubb, 2012). On the basis of these findings, Clubb (2012) advises protocols within the school to ensure that the school representative is in a position to be consistently involved in the child's school life and willing to communicate and share information with other school staff members. This would ensure dissemination of information to other staff, joint problem-solving with parents and the maintenance of positive communication channels. It is not clear that these recommendations had been followed within Helen's school once initial training had been completed.

As identified within chapter 2, Butt and Lowe (2011) examined the effect of TA training on the individual's ability to support both the teacher and the student. Results indicated that targeted, skills-based training was benficial to the TAs. Laura was able to describe a staged approach to working with pupils with a range of challenges within her previous setting, although this did not appear to be part of a formal training opportunity. For others, it appears that all were placed with pupils with complex needs, and it was only when difficulties emerged that support was provided or responsibility shared. Despite the challenges few training opportunities were forthcoming.

5.2.3.1.3. Training - challenges

Lisa clearly expressed a lack of SE, feeling that she had "fallen into" the role, with little access to ongoing training or support. She was keen to develop her skills further, as were all TAs interviewed, and even welcomed unpaid opportunities (as did Laura). The finding that classroom assistants had learned to teach children "on the job" (Carroll, 2001) was therefore substantiated. Additionally, Riggs (2001) similarly found that instruction for TAs was often sporadic and rarely part of a comprehensive professional development programme.

Paraprofessionals can find on-the-job training a helpful form of instruction (D'Aquanni, 1997), however, might still experience insufficient opportunity to ask questions or expand their knowledge due to a lack of planning time. Benefits were also identified by Young (2006; cited in Giangreco, 2010), but more explicit training via workshops was still sought by over 70% of the participants in the study. It might seem that little change has occurred over time, since more recent exploration has indicated that 97% of LSAs interviewed wanted further training and SENCOs agreed that LSAs need professional development in a range of areas, including autism (Abbott, McConkey & Dobbins, 2011).

Although the TAs participating in the SSIs sought training, they identified constraints to such attendance, including a high level of reliance on the TA to support the child, meaning that they could not be released from the role. In addition, terms and conditions of employment meant that staff were only paid for the hours they spent with the pupil, a factor clearly identified by Wilson and Bedford (2008).

In order to ensure that training has a positive impact upon TAs, the characteristics of effective professional development need to be determined. These are numerous and highly complex (Guskey, 2003). Laura was very clear about her preferred learning style, and did not find online learning opportunities to be of use. Such sentiments were echoed by TAs in Austin's unpublished study (2013), where self-study materials were found to be undesirable.

The impact upon SE of explicit training for support staff has been mixed (Gerber, Finn, Achilles & Boyd-Zaharias, 2001; Giangreco, Edelman, Broer, & Doyle, 2001; Pickett, Likins & Wallace, 2003, Weiniger, 2008). It has been suggested that training is differentiated for different school personnel (Hess et al. 2008) with informed, targeted training for all groups working with pupils with ASD being most beneficial (Humphrey & Symes, 2011). Farrell et al. (1999) recommended that such training is collaborative and relevant to the task, and specifically aimed at TAs rather than teachers. This was substantiated more recently by Austin (2013): TAs requested training that was individualised, based upon the needs of the pupil they supported, and relevant to the context in which they worked.

The analysis of studies assessing the impact of training on paraprofessionals supporting those with autism (Rispoli, Neely, Lang & Ganz, 2011) suggested that training protocols which comprised a range of approaches such as written and verbal explanation, modeling, video demonstration, role play and feedback might improve accuracy of intervention implementation. Such a range of approaches might tap into the sources of SE for TAs supporting

pupils with ASD. However, it was expressed within this study that further research was required.

Further examination of factors influencing TA SE and its susceptibility to influence in training was undertaken by Higgins and Gulliford (2014), with data analysed in relation to Bandura's sources of information, outcome expectations and whole school support and norms. The coach-consult model (Balchin, 2007) was found to support SE in addition to addressing contextual factors including the perceived status of TAs in schools. It was recommended that TAs were given opportunities to develop enactive mastery, allowing the chance to practise and reflect upon the interventions discussed during the direct training.

The literature reinforces the fact that the transfer of skills from training does not occur in isolation, rather it is mediated through the relationship between the TA and the school culture. Stand-alone opportunities for TAs will not embed within the school culture unless all staff have a shared vision and understanding in relation to supporting the pupil with ASD (Clubb, 2012; Lindsay, Proulx, Thomson & Scott, 2013).

5.2.3.1.4. The TA role

Clear understanding of roles, is seen as important in enabling individuals to contribute to an organisation (Rayner & Gunter, 2005). However, TA participants within SSIs explained the wide-ranging nature of the role in which a range of skills, knowledge and understanding might be assumed by the school as an organisation, but not necessarily explicitly shared with or held by the TAs. Moyles and Suschitzky (1997) described TAs as: "Jills of all trades", and, directly echoing themes within the current research, Wilson, Schlapp and Davidson (2003) found them to be an 'extra pair of hands' within the classroom.

Both high and low scoring TAs expressed a mismatch between their understanding and expectations of the teacher and TA role within their settings. This reflects research which identifies significant ambiguity in the TA role (Bach, Kessler & Heron 2004; Cremin et al., 2005; Mistry et al., 2004). Such role confusion, in addition to a different emphasis and perception by class teachers and TAs of the skills required to perform in the role of a TA, was similarly found by Butt and Lowe (2011). When the required skills to carry out a task are not specified, staff are unable to accurately judge their efficacy.

In research upon career choice, Bandura (1997) posited that individuals make judgements about their capability to carry out roles based upon a perception of what the role entails. These perceptions may reflect reality or be more fanciful. It is possible that the perceived role of TA taken on by the participants in the SSI bears little relation to the actual role of supporting a child with highly complex needs, possibly within a less than supportive environment.

Pre-held views about the role and expectations could have been gathered within the SSI to discover to what degree there appeared to be a match with expectation. It might follow that where a mismatch is found, lower SE for the role might be expressed. Since perceived efficacy is likely to promote "steadfastness to a career and high performance in it through motivational, cognitive and affective processes" (Bandura, 1997, p. 425) there may be important implications for staff wellbeing and retention. Since women in particular base their occupational preference far more upon their perceived efficacy than on potential benefits such as salary, advancement, responsibility etc., (Bandura, 1997), this construct is particularly pertinent in relation to a largely female TA population.

High expectations of the TA supporting pupils with ASD, were identified within the SSIs, The TAs in the study felt clear responsibility for assessing need and tailoring tasks for the ASD pupil, reflecting the DISS research

(Webster et al. 2010) which found that TAs have become the primary educators of pupils with SEN. Within the Webster et al., study, TAs felt under-prepared for the tasks they were given. There was little or no time to liaise prior to the lesson and TAs had to tune in to the teacher delivery in order to identify subject and pedagogical knowledge, and information and instructions relating to the tasks where support was required. TAs within the current study also held instructional teaching roles, with comments mirroring previous research findings, despite the fundamental question of whether the TA should have a pedagogic role at all (Webster et al., 2010b) remaining unanswered.

Given that the role of TAs supporting pupils with ASD is being carried out in an ill-defined form, it is important to TA SE that staff are appropriately trained and supported to make expectations achievable (Sharples et al., 2015). However, as Rose and Forlin (2010) note, whilst any ambiguity about the role remains: “the impact of training on changing practice is likely to be limited” (p.320).

It might be that the constructs of role and identity, as explored by Harris and Aprile (2015) in relation to TAs, are relevant considerations in assessing impact upon TA SE. Lacking both a clear role and a clear identity within the school setting might be expected to negatively impact upon SE. However, having clarity around these in terms of being viewed as a specialist in relation to ASD, receiving appropriate training and support, might promote increased SE. This could fruitfully be explored further.

5.2.3.2. Vicarious experiences

Vicarious experience or modelling is believed to be the second most effective way to build SE (Wise & Trunnell, 2001; Chowdhury, Endres & Lanis, 2002). TAs identified a number of ways in which they had, or perceived they could, develop their skills via models who had proficient skills and knowledge of strategies.

5.2.3.2.1. Accessing outside agencies

All TAs discussed outside agency involvement during SSIs. EPs and outreach staff from specialist ASD provision were mentioned explicitly. The discussions were described as being “fascinating” and “interesting”, however, impact upon SE is unclear. Helen noted that specialist outreach staff had visited the school to observe children and provide strategies, however, explained: “she’s not modelling, and that’s different”.

Since vicarious experience, or modelling, affects SE via a social process of self-comparison, it would be useful to understand the impact of outside agency involvement upon TA SE when modelling does take place. In terms of issues of expertise and power it might be expected that TAs do not perceive these models to be “like themselves”, and the activity may therefore be of less value than watching a highly regarded peer.

5.2.3.2.2. Visiting other settings

The lack of perceived specialist knowledge within the mainstream environment, and its availability within local specialist settings was seen by TAs as a valuable resource. Helen explained that seeing techniques demonstrated would be far more helpful to her than reading books. Similarly Laura explained that repeated visits to specialist settings had enabled her to take ideas away and apply them within her own setting. The possibility of visiting such resource bases would therefore seem to be a possible way of increasing SE.

5.2.3.2.3. Seeing strategies applied

All TAs interviewed had sought to develop their skills and understanding in a variety of ways, including watching television programmes to see techniques in action.

Capabilities are judged in relation to others (Bandura, 1977, 1986, 1997; Wood & Bandura, 1989). TAs taking part in SSIs had been able to observe others by working alongside or noticing others' carrying out their work. Watching the practice of others seemed to be a key way of developing approaches to supporting the pupil's learning. The low scoring TAs in particular appeared to place great value upon prior experience of this, and expressed hope for future opportunities.

No TAs had observed pedagogic techniques of teachers or other staff as part of a planned learning and development opportunity, however, having felt that there was real value in observation of others' practice, Laura suggested that more formal opportunities could be provided: "because I think if you watch someone in action - what do they do, what sort of things do they say, how do they say it, and how it works, then you can pick that up". In a study focusing upon a range of staff working with pupils with ASD, Austin (2013) noted that all stakeholders agreed that the most helpful format for paraprofessionals supporting students with ASD would be to observe other effective staff and to be able to problem-solve with others. Such opportunities within the TA's current setting or within other schools, including specialist environments, could helpfully form part of an appropriate induction programme for new staff.

Although comprehensive guidelines regarding evidence-based practices (EBPs) to address the needs of students with ASD (Odom, Collett-Klingenberg, Rogers & Hatton, 2010; Erbes, 2010), have been available for a number of years TAs indicated that teacher skill levels were highly variable, and frequently weak in relation to supporting a pupil with ASD. This is perhaps unsurprising given earlier research that indicated that only 5% of UK teachers received training about autism despite the majority of teachers having a child with autism in their class (McGregor & Campbell, 2001).

Consequently, models of support provided by class teachers could fall short in terms of demonstrating approaches and strategies that are effective, and

could usefully be copied by the TA. TAs made frequent reference to inappropriate and unhelpful involvements from teachers which might impact upon their own SE judgements. If the TA perceives the teacher as an individual who should have the required expertise, teacher "failure" could lower the SE of the TA. Conversely, it would be interesting to consider the teacher perception of SE in relation to a high performing TA who views themselves as the expert on the child.

Approaches such as cognitive modelling, where the model narrates the thought process behind the actions taken, have been successful in developing SE in trainee teachers (Gorrell & Capron, 1990) and might be a consideration in terms of a vicarious style of intervention to develop TA skills.

5.2.3.3. Verbal persuasions

Verbal persuasion is thought to be the third most effective way to develop SE (Wise & Trunnell, 2001; Chowdhury et al., 2002). The evidence of verbal persuasion as a source of information was variable across participants within this study.

5.2.3.3.1. Communication with colleagues

It appeared that TAs received little verbal feedback on their capacity to carry out the role. For some staff this represented a change from previous practice, particularly for Laura and Helen for whom such opportunities within the setting appeared to have declined.

TAs clearly expressed the fact that they required direction and support from the class teacher, however, this was not always forthcoming, with a range of practice being described in terms of planning and differentiation for the child with ASD (as identified above). Hannah described teacher planning as good, despite the clear expectation that the TA would then differentiate as required for the pupil with ASD. Similarly Helen explained that knowing the teacher

expectation was key, so that the planning could then be carried out by the TA. These comments represented a level of mismatch between what might be appropriate, and what was actually taking place within settings. Again, such practice required a high level of tuning in to teacher expectation without any explicit face-to-face discussion taking place, representing missed opportunities for constructive persuasions (Webster et al., 2010b).

Milner (1998) identified a lack of communication between teachers and paraprofessionals in schools, with the teacher being inadequately trained to oversee the role of the TA. Findings were also in line with previous studies that have identified that relationships between TAs and teaching staff could be challenging (Howard & Ford, 2007), and mirror those of Blatchford et al. (2009) who noted that 75% of teachers reported having no allocated planning or feedback time with the TAs in their classrooms. In an earlier study, those TAs who did have time for planning felt that there were clear benefits both for themselves and the pupils with whom they worked, and: "realise that their own work is enhanced when they are able to share the difficulties and successes with the teacher who planned the tasks" (Blatchford, Russell, Bassett, Brown & Martin, 2004, p. 23).

Sharing planning for the lesson and having opportunities to feedback could provide opportunities for constructive verbal persuasions to be received by TAs. Persuasive messages are most informative when the persuader is intimately familiar with the task at hand so that feedback is diagnostic of strengths and weaknesses (Bandura, 1997). It appeared that the perceived deficits in teacher knowledge and skill identified by TAs meant that teachers might well be unable to provide the type of feedback which might support the development of TA SE.

With realistic encouragement, it is suggested that individuals will exert greater effort, becoming more successful at the task (Wood & Bandura, 1989). Giangreco and Doyle (2007) suggest that class teachers and TAs should meet frequently to plan ways in which to include the child with a

disability and to identify and understand “individually appropriate learning outcomes” (p.18). This would then provide an opportunity for feedback and reflection, potentially supporting TA SE in carrying out the task. Furthermore, building trusting relationships between teachers and TAs contributes to the success of the whole team working within the school setting (Vieno, Santinello, Pastore & Perkins, 2007; Kozaryn-Miskavitch, 2006).

From Helen and Laura’s experience, the SENCO had provided valuable opportunities and was viewed as a knowledgeable and supportive figure. Explicit opportunities to receive verbal persuasions from the SENCo might also prove to be a way forward.

TAs expressed that teachers had a demanding role and that time was short, and it appeared that they might have restricted their demands or interactions with the teacher because of this. Houssart and Croucher (2014) suggest that such perceptions limit knowledge transfer between staff, and additionally reflect hierarchical structures in which a TA, despite high skill and experience levels, might not share insights upwards from the TA level. This would be a particular loss given the expertise TAs hold in relation to the child.

5.2.3.3.2. Communication with parents

TAs expressed a range of involvement with parents and carers. This was related to individual experience and not to whether the TA who took part in the SSIs was rated as high or low scoring with respect to their SE on the TASCA. The experiences of TAs were all different, with Laura (the parent of a young person with ASD) placing great emphasis upon the value of a strong and supportive relationship with the parent in order to maintain consistency and to achieve the best outcomes for the child. Hannah echoed these sentiments, describing a cohesive approach to meeting needs which extended to the wider family, including the grandparent. Lisa seemed more ambivalent about the relationship, and this appeared to be because her opportunities to communicate were mediated by the SENCO, leading to a

lack of clarity, or were only possible when the child was present – which was found to be a barrier to open communication.

Mothers of children with additional needs can identify closely with the TA supporting their child (French & Chopra, 1999), however, they can also be alert to issues associated with the lack of training, low pay, and lack of respect for the position. Of interest was the finding that the mothers believed that the respect accorded to TAs reflected the respect accorded to their children. This might have implications for the way in which the TA is included in important conversations about the child, and their status as an unacknowledged expert within the system. When time is not explicitly provided for communication with parents and with other staff such lack of status and import is reinforced.

As identified earlier, low levels of parental SE can result in poor persistence, depression and diminished satisfaction in the role of the parent (Johnston & Mash, 1989) and parental SE is negatively correlated with children's behaviour problems (Mouton & Tuma, 1988). Given that parental involvement is a key element of successful inclusion of a child with a disability in a mainstream classroom (Lindsay et al., 2013), increased clarity and opportunity in terms of the TA role in relation to the parent needs to be agreed and implemented.

5.2.3.3.3. Messages from the school

The TA works within a complex system where efficacy beliefs can be enhanced and promoted (Jordan & Stanovich, 2004. Ainscow, 2005, Webster et al., 2011). TAs discussed systemic issues within the SSIs, in particular the role and status of the head teacher and senior leadership team (SLT).

The role of SENCO was raised by all four TAs. Laura noted that in a previous setting the SENCO was knowledgeable, and staff had received feedback,

been involved in meetings and problem-solved situations together. This had been valuable, however, the opportunity was not available within her current school. Having other capable staff members within a setting could be a powerful source of inspiration as clearly exemplified by Laura: “they are just amazing and I put them on a pedestal.” Verbal persuasions from such staff can be a powerful support to TA SE, and suggest that mentoring or coaching by highly credible and persuasive individuals might be of value.

Some TAs were anxious about the receipt of negative feedback. For example, Lisa did not want to be seen as “failing”, despite the fact that she had “fallen into” a role with no formal pathway for training or support. Having low levels of SE, it is likely that she would avoid situations that were perceived as challenging – and if such situations could not be avoided, this might well result in negative emotional affect including fear or anxiety (Bandura, 1997). The remaining low scoring TA and both high scoring TAs felt more supported and felt confident to learn from mistakes. This might have been a function of the organisational support available to them. Despite this, when faced with challenge, Laura explained that she herself reflected upon what had happened and considered ways in which she might deal differently with a future challenge, rather than having a planned and supportive opportunity to do so.

As identified above, “the impact of persuasory opinions on efficacy beliefs is apt to be only as strong as the recipient’s confidence in the person who issues them” (Bandura, 1997, p.105). TAs need to have confidence in the nature of the feedback provided by other members of the school system. If such opportunities are lacking, TAs would potentially be less likely to expend and sustain effort, and to dwell on personal deficiencies.

Opportunities for progression within the role were discussed by Laura, who was disappointed in the lack of opportunity. Career progression and training were seen as motivating factors for TAs within the research carried out by Hammett and Burton (2005), with half of the TAs surveyed perceiving

specialist roles as motivating. It could therefore be highly motivating and a support to TA SE if those supporting pupils with ASD were able to follow a structured developmental pathway where knowledge and skills could be acknowledged and shared.

Inclusion was explicitly discussed by the TAs as a concern within SSIs. Lisa explained that just to have someone sitting with the pupil appeared to be sufficient in supporting the notion that a pupil was included and supported. Laura felt that her school, which was previously felt to be inclusive, was now far less so, with a lack of communication and a lack of whole school understanding being observed. This sentiment was mirrored by Helen. A lack of inclusion was explicitly discussed by Hannah. TAs were over-relied upon and this impacted upon, and was affected by, the school ethos of inclusion - or lack of. As well as the child being physically distanced from some of the daily activities of the class, the TA felt similarly "on a limb". The SLT and wider mechanisms such as the academy or local authority were seen as crucial in setting and supporting the ethos of the school.

Such concerns appear akin to Higgins' (2009) analytic theme of "whole school support and norms" where organisational factors affecting TA SE were identified. These included organisational climate of the school and the value in which the TA was held within that climate.

In Symes and Humphrey's (2011) study of TAs supporting pupils with ASD in secondary schools, analysis showed that components of an inclusive school culture included positive staff attitudes, and SLT support for inclusion, collaboration and respect. Factors that facilitated or hindered the ability of TAs to effectively include pupils with ASD were access to expertise (including the SENCO), communication within school and teacher awareness of ASD. Lindsay et al. (2013) similarly identified factors that impacted negatively upon the successful inclusion of pupils with ASD, including a lack of understanding of the needs of pupils with ASD, a lack of training and resources in relation to ASD, and the need for teacher support in understanding and managing the behaviour of students with ASD.

Leaders of organisations have a responsibility to promote staff SE by creating an environment which increases self-confidence and supports teamwork (Pearlmutter, 1998). Feedback from those in leadership has been found to be an important factor in building and maintaining SE (Chowdhury et al., 2002).The work of Devecchi & Rouse (2010), who explored notions of support and collaboration between teachers and TAs in two secondary schools might be helpful in providing ways forward. Team members created opportunities for collaborative practices aimed at including each other in the task of providing support for children who were described as having difficulties in learning. The data suggested that the successful inclusion of students is dependent on how schools as organisations and communities are able to support the inclusion of adults as well.

5.2.3.3.4. Outside agencies

All TAs reflected upon the support provided to the school by outside agencies. As observed above, given that TAs were supporting a pupil with a statement or plan, it appeared that opportunities were lost when TAs did not take part in planning and review meetings for the pupil with ASD. Being party to discussion “straight from the horse’s mouth” was valued by Hannah, who had had such opportunities, but bemoaned by Helen who explained that only the SENCO was party to discussion around the pupil.

Although the involvement of the TA in outside agency visits was variable, when it did occur, it could be highly motivating, and something that might impact positively upon practice. According to Bandura (1997), the level of credibility of an individual has a direct influence upon the effectiveness of verbal persuasion, with an increase in credibility leading to greater influence. Therefore a higher status and more specialist individual could prove to be a powerful provider of verbal persuasions to the TA, supporting their SE in relation to support for the pupil with ASD. It might be that there are parallels for TAs in the findings of Ruble et al. (2013), who note that teachers in special education might rely upon support from individuals who are directly

involved in supporting their teaching, such as an autism specialist, in developing their beliefs about what they can accomplish within their classroom.

Redmond (2010) notes that although verbal persuasion is likely to be a weaker source of SE beliefs than performance outcomes, it is widely used because of its ease and ready availability. Access to external professional support would therefore appear to be an important consideration for all TAs who support children with ASD, and has implications for the way in which the school and the professionals plan meetings in schools.

5.2.3.3.5. Support and supervision

Empowerment strategies which provide emotional support within a trusting group atmosphere can be effective in strengthening SE beliefs (Conger & Kanungo, 1998).

Supervisory and support mechanisms within the schools where participants worked were both variable and sparse. Laura was the only TA to mention appraisal as an opportunity to focus upon self-development, however, it had not been possible for her targets to be actioned. TAs indicated that they would value support around managing and developing pupil skills in addition to meeting their own development and emotional needs. Guidance was sought in relation to how pupils might best be supported, with value placed upon reflections around what had worked well in addition to how difficult situations might be managed. Listening to ideas and opinions from TAs at different stages of their own development was identified as an opportunity for TAs to develop their own skills. Monthly or termly opportunities for mentoring, catch-ups, joint problem-solving and supervision were presented as ways in which this could be achieved.

Cromwell and Kolb (2004) contend that supervisor support is not only a critical factor in organisational climate, but in the transfer of learning and the

degree to which skills are implemented in the work environment. Helen had experience of supervision via the ELSA programme in which half-termly meetings with fellow TAs took place, chaired by an EP and following a range of models including Solution Circles (Brown & Henderson, 2012; Grahamslaw & Henson, 2015). For the remaining TAs, no such planned opportunities existed.

As with training opportunities, questions of cover and pay might be implicated within supervisory approaches that take the TA outside their daily role and school setting. The ELSA programme requires agreement with the school that TA pay and cover for supervision is agreed, and would thus appear to be a possible model of practice in relation to support for TAs supporting a pupil with ASD. Such opportunities within school time also reduce issues such as familial and other responsibilities outside the school day (Austin, 2013).

For all TAs, peer supervision was mooted as a possibility, and it was of interest that none suggested that this might be a teacher, or higher level, role or responsibility. Training is lacking for special education teachers regarding supervision of paraprofessionals (Carter, O'Rourke, Sisco & Pelsue, 2009; Griffin-Shirley & Matlock, 2004), and teachers within mainstream environments have been described as ill-prepared for supervisory roles (Drechtrah, 2000, cited in Lewis & McKenzie, 2010), challenged by factors such as managing the balance of authority (Salzberg & Morgan, 1995). Therefore, peer supervision might be supportive and appropriate. Receiving constructive verbal messages from those who also carry out the role and do so successfully might serve to boost TA SE. Conversely, one might have to guard against perceptions of "failure" in experienced and well-respected TAs which could lower SE in others.

Since the support of a supervisor can have a significant impact on overall job satisfaction and work environment (Ellinger, Ellinger & Keller, 2005), it seems important for TAs to have clear and planned opportunities for this to take

place. A broad range of peer supervision strategies exist (Heron, 1993) and appropriate models could be explored further, particularly in relation to the possible impacts upon SE.

5.2.3.4. Physiological and affective states

Physiological or affective arousal is named as the fourth determinant of SE (Bandura, 1986; Wood & Bandura, 1989). Emotional arousal can arise from stress and anxiety and can lower SE expectations. Increased competence is experienced when individuals are not experiencing strong aversive arousal.

5.2.3.4.1. Challenge

All four of the interviewed TAs spoke at length about the level of challenge they experienced within the role, irrespective of whether they were high or low overall scorers in terms of perceived SE. Language could be emotive and frequent reference was made to the emotional demands of the role. The task was described as ill-defined and difficult, and the tools required appeared to be lacking.

The way in which emotional states are interpreted and evaluated is important for the way in which SE beliefs are developed. Those with low SE attribute failure as a lack of ability and limit future endeavours, whereas those with high SE attribute this to a lack of effort and show increased resilience (Bandura, 1997).

Despite the challenges and obstacles described, TAs appeared to persevere in their efforts. Hannah described herself as resilient. It appeared that she had a strong sense of personal efficacy, which would result in greater perseverance and an increased likelihood that the chosen activity would be performed successfully (Bandura, 1977). This efficacy appeared to be based upon academic learning, and a range of prior experiences which effectively supported the role. As identified earlier, this contrasted with Laura who had

significant prior experience both in working as a TA and with pupils with ASD, however, such experience was insufficiently similar to the current demands for her to feel efficacious. As a consequence, the role was emotionally challenging and draining. Similarly, Lisa appeared to be lacking in agency and clearly attributed higher levels of ability to her peers.

Being able to diminish or control anxiety may have a positive impact on SE beliefs, however, if there is no mechanism available for providing this, then there is the risk of lower SE expectations.

Teacher SE is vulnerable in the face of supporting children with significant behavioural needs (Giallo & Little, 2003). Corona, Christodulu, and Rinaldi (2016) also assert that SE varies as a function of student characteristics. Tensions reported by school staff are shaped by the behaviours pupils with ASD exhibit, particularly in relation to their difficulties in social and emotional understanding (Emam & Farrell, 2009). Such tensions determine the quality of the transactions and interactions occurring between teachers and the pupils. In order for these tensions to remain manageable, it is suggested that teachers rely heavily upon the TA, whose role in working closely with the pupil is perceived as being indispensable. The challenges identified by TAs in the present study would thus be expected to constitute a threat to SE.

In order to appropriately utilise TA support, schools might consider targeting TAs towards particular tasks, specifically those identified as most challenging, based upon TA SE in relation to the task (Giallo & Little, 2003). Additionally issues of supervision and support require clear consideration (5.3.3.3.5.).

5.2.3.4.2. Isolation

Although pupils with TA support might sit within the physical space of the classroom, they are often quite isolated from the teacher and the curriculum

(Blatchford, Russell, & Webster, 2012; Webster et al., 2015). This is closely mirrored by the TA experience.

The difficulties in accessing teacher and wider leadership time and support were noted by all TAs, with a sense of both physical and emotional isolation clearly emerging. The former was a consequence of pupils being taught outside the classroom for small parts, or almost all of, the week. The latter appeared related to the TAs floundering in their attempts to understand and carry out the role whilst feeling that teaching staff were unable to support because of their own weak skill base and lack of understanding of ASD (5.2.3.3.3.).

In examining SE in teachers of children with ASD, Ruble et al. (2013) found that SE was most strongly negatively correlated with stress associated with loss of satisfaction/need for support. Screening for early indicators of stress might enable the implementation of interventions to decrease stress and increase SE. Thus it is important to provide empowering and supportive strategies which provide emotional support (Conger & Kanungo, 1988) (5.2.3.3.5.).

Dixon (2003) asserted that a key issue in schools is the resourcing of non contact time for teachers and TAs to plan together, with a significant number of participants in the study stating that their key recommendation would be paid time in school hours for planning and liaison. Such an approach would allow closer and possibly more supportive relationships to be built within schools (Wilson & Bedford, 2008) which might have positive impacts upon TA sense of isolation which might be anticipated to impact positively upon affective and physiological states.

5.2.3.4.3. Emotional needs of the TA

All TAs expressed the significant emotional demands of the role. This might be expected give the widely available research which has assessed the impact of caring for a child with additional needs, and with ASD in particular (Davis & Carter, 2008; Estes et al*.,* 2009; Giallo et al., 2013). Despite this, there is minimal literature on the emotional needs of TAs themselves (Minondo, Meyer & Xin, 2001). It is known that emotional arousal resulting from stress, fear and anxiety can lower SE expectations, with individuals feeling more competent when not experiencing strong aversive arousal (Conger & Kanungo, 1988), therefore, the TA contributions within SSIs would indicate that supportive strategies are required.

Despite some highly emotive descriptions of their day-to-day activities, all TAs appeared to find satisfaction in their roles. Blatchford et al. (2004) found that teachers' positive attitude towards TAs was the primary source of job satisfaction, the second being pleasure over pupil progress. The close relationship described between TA and pupil within the SSIs might support this second finding.

It could be that the TA experience mirrors that of teaching staff in relation to the availability of support from those of high status within the system. Teachers who perceive more support from their principals are less stressed and more committed and satisfied with their jobs in comparison to those who perceive less support (Billingsley & Cross, 1992). TAs within the study had variable access to, and support from, higher status individuals and this could be explored more explicitly.

Leadership climate at higher levels of an organisation can affect SE by enhancing role clarity, and at a lower organisational level, by moderating psychological strain (Chen & Bliese, 2002). It would seem that the TAs within this study would be significantly supported if the school as a whole had confidence in their ability to effectively include pupils with ASD.

It is perhaps the nature of the task which means that the emotional component of the TA role is high, given that it comprises both high levels of decision-making, based upon often inadequate training and direction, with complex pupils who are themselves challenged in their social and communication skills. The relationship-based rather than just task-based nature of the role therefore merits further focus.

5.3. Strengths and limitations within each phase of the research

5.3.1. The research paradigm and design.

This study adopted a social constructionist paradigm in order to access individuals' constructions of their own reality (Punch, 2005). This suited the exploratory nature of the task, and the focus upon the psychological construct of SE. Traditionally, researchers have elected to use either quantitative or qualitative methods in research (Robson, 2011), focusing upon either numerical or descriptive data (Creswell, 2003), however, in seeking to explore and understand participants' perceptions of SE in relation to supporting children with ASD in mainstream primary schools, a mixed methods design was deemed a suitable choice in helping to move via an inductive process towards an increased understanding of the construct.

The research question and purpose were at the forefront in guiding decisions about the most appropriate methods to use (Klingner & Boardman, 2011) with the understanding that the positivist can use interviews and that the interpretivist might use a survey as complementary in answering a research question (Glesne & Peshkin, 1992). Therefore, the methods utilised appeared to be an appropriate way to gather data in order to address the research question.

5.3.2. Methodology.

It was felt that the qualitative approach to data collection taken within phases 1 and 3 of the research enabled detailed, in-depth data to be collected (Bryman, 2012). Since qualitative methods are suited to accessing subjective meanings about how people experience and make sense of the world (Willig, 2001) it was a suitable method of choice to enable a better understanding of the social construct (Henwood, 1996).

The quantitative aspects of data collection enabled a large participant population to be accessed. From this, the high proportion of participants willing to participate in a SSI with the researcher enabled those with high and low SE to be identified, and further exploratory analysis to be carried out.

5.3.2.1. Phase 1: What constructs do TAs report in relation to their performance of their role in supporting pupils with ASD?

5.3.2.1.1. Strengths

It was felt that the focus group discussion generated rich data that provided additional items and supported the amendment of items for the development of the TASCA questionnaire. The information sheet for participants **(Appendix C, p. 240)** appeared to appropriately identify the scope and detail of the study (Braun & Clarke, 2013). Demographic data was additionally collected as a way of describing the sample (American Psychological Association, 2010) and as an acknowledgement that all participants belong to a specific cultural “space” (Braun & Clarke, 2013. p. 68).

The focus group data fit well into the social constructionist framework, providing information about the co-construction of realities between people, whilst reducing the researcher’s power and influence (Kitzinger, 1995). By virtue of the numbers of participants involved, the balance of power was shifted during data collection, so that participants had some control over the interaction. Although difficulties might arise precisely because of this, none were noted during this study, and participants talked freely for the duration of the process, generating data on the synergy of the group interaction (Green,

Draper & Dowler, 2003, cited in Rabiee, 2004), with prompts from the researcher. Individuals in the group appeared to engage fully in the discussion, perhaps because of the homogeneity of the group (Krueger & Casey, 2009).

Since it has been suggested that participants might not feel comfortable responding to questions addressing SE and expertise (Edwards, Thomas, Rosenfeld, & Booth-Kewley, 1997), steps were taken to ensure that, as much as possible, participants felt confident to contribute their views within a supportive environment, and indeed, a number of participants commented upon the enjoyment, value and interest gained from taking part in this activity.

5.3.2.1.2. Data analysis

When organising the focus group and semi-structured interview data, thematic analysis was utilised to create themes (Braun & Clarke, 2006). The decisions made within the process of analysing quotes to identify possible codes, and naming themes is inevitably a process that lends itself to researcher bias.

Braun and Clarke (2006) argue that the guidance they provide: “offers an accessible and theoretically flexible approach to analysing qualitative data” (p.77). Within this study it was found that thematic analysis constituted a less prescriptive approach in comparison to other forms of qualitative analysis (e.g., grounded theory), and as a result of the flexibility within the process, the choices outlined by Braun and Clarke (2006) were considered before analysis, maintaining continuous reflexive thinking throughout the analytic process.

This method was valuable in identifying unanticipated themes and helped to identify the similarities and differences between what had been found within existing research and guidance, and from those engaged in the focus group.

Rabiee (2004) recommended that additional data in the form of reflection about the interview, the setting, and non-verbal communication between the participants might add valuable dimension to the construction and analysis of the focus group data. The researcher elected not to record this information since it was not believed that this would add to the content-based data required for the questionnaire formulation.

5.3.2.1.3. Limitations

The focus group interview relied upon non-probability purposive sampling. Participants in all phases of this study were predominantly female. Given the nature of the sample, this might mirror the TA population within the geographical area surveyed, however population demographics are not available on which to make this assertion (Kemper, Stringfield & Teddlie, 2003). Additionally, there is no way of ascertaining whether the participant sample is more widely representative, either geographically or socio-economically, therefore, generalisability to a wider population is limited (Creswell, 2003). Rabiee (2004) suggests that a lack of confidence and low self-esteem in participants from low income or minority ethnic groups can prevent these individuals participating in a group discussion - it is not possible to know whether this was a factor within this study.

The name of the researcher would have been known to head teachers within a quadrant of the county, but not necessarily to others. Similarly, some TAs had had direct involvement with the researcher and might have volunteered to be involved on that basis. It is not known what effect this might have had on the results gained.

5.3.2.1.4. Next steps

One might seek to engage focus groups within a range of LAs to provide a wider perspective on TA SE. Such an approach was beyond the scope of

this project, however, if one is seeking only to support understanding and staff development within the identified geographical area, the information gained might be deemed sufficient.

5.3.2.2. Phase 2: What SE ratings do TAs give in relation to supporting pupils with ASD?

Insights gained from the focus group interview provided conceptual definitions of the concept of SE in TAs supporting children with ASD. This information, combined with the evidence gained from the literature review, enabled items to be written to explicitly capture the specific construct being explored.

5.3.2.2.1. Sampling

An opt-in participant population completed the TASCA, with limitations reflecting those identified above. Head teachers who felt that their staff were efficacious might have forwarded the survey link, whereas those who had doubts about their staff's efficacy might not have done so. Likewise, it is not possible to ascertain why some staff accessing the questionnaire decided not to provide consent, or to know how these staff differed from those who did complete the survey.

All participants were aware of the anonymity and confidentiality of their responses in order to mediate against socially acceptable responses. Additionally the time at which surveys were taken suggested that many were completed out of the school context. This physical and psychological distance from the school might have impacted upon the responses given.

5.3.2.2.2. Response categories

Participants completing the TASCA appeared to use response choices across the 0-100 continuum offered, varying by item. Thus, responding in

gaps or jumps of 5-10 as noted by DeVellis (2012) to be a possible difficulty with such response scales was not evidenced.

5.3.2.2.3. Survey length

The researcher was aware of the practical implications of questionnaire length and response burden, with lengthy questionnaires and low response rates having an impact on the validity of responses in a number of ways: volunteer bias (Roth & Bevier, 1998); increased use of the modal response category (Kraut, Wolfson, & Rothenberg, 1975); and identical responses for all items (Herzog & Bachman, 1981).

It was deemed important to present sufficient items to capture all elements of the construct, to incorporate the additional research evidence and the pilot feedback, resulting in a 36 item survey with 7 demographic data items. It proved challenging to devise a questionnaire with fewer items. However, the pilot questionnaire took 7-15 minutes, thus indicating that it might be manageable within recommended time scales (Galesic & Bosnjak, 2009; Handwerk, Carson, & Blackwell, 2000). In practice, participants spent between 5 and 95 minutes completing the scale. It is not known whether any breaks were taken during completion of the scale, or how long these were. Subsequent item analysis indicated that the survey could be shortened without reducing reliability.

5.3.2.2.4. Data Analysis

Descriptive statistics were used to analyse scaled items within the TASCA scale using SPSS® 23.0.

Despite there appearing to be rigour within the quantitative elements of the analysis, this analysis clearly relied upon the questions that had been formulated, as identified above. An instrument can yield consistent, reliable

results, but will be invalid if it is measuring the “wrong” construct. It is felt that clear steps were taken to ensure that the construct was clearly identified.

Demographic data was gathered. It would have been more helpful to ask how long a TA had worked with pupils with ASD rather than as a TA, since this figure cannot be used as an indicator of mastery.

Factor analysis could not be completed because of the number of questionnaire items and the number of surveys completed (see 5.2.2.2.7.). However, this might have provided useful information about the questionnaire and had implications for its further use.

5.3.2.2.5. Use of an online survey

The online survey approach proved to be an effective way in which to gain a relatively high number of responses within a short time period. Over 4 weeks, 83 surveys were initiated and 50 completed. The approach is highly cost-effective and the software intuitive.

5.3.2.2.6. Validity

In devising the TASCA, it was important to ensure validity in relation to the target population, therefore, focus group data, in conjunction with relevant research, were combined to create a tool with content validity (DeVellis, 2012). Piloting with an expert panel was carried out as a further check to ensure that items were representative of the construct that the questionnaire was designed to measure. This enabled the removal of any items that were not representative of the construct, thus supporting claims of content validity. Semantic, editorial and time issues were additionally identified and amendments made. All pilot respondents agreed that the survey clearly reflected the activities which would tap into SE for TAs supporting children with ASD, therefore the researcher had increased confidence in its validity.

In order to ascertain validity of the TASCA, it would be necessary to accumulate evidence across time, settings and samples to build a scientifically sound validity argument. Thus, establishing validity is an ongoing process of gathering evidence (Kane, 2006). Additionally, it is noted that reliability and validity are not properties of the survey instrument, *per se*, but of the way in which surveys are scored and interpreted (Cook & Beckman 2006).

In order to standardise the TASCA, factor analysis would be required. The opposing perspectives existing in relation to recommended sample size were considered. One indicates that *N*, or sample size, is key, with Gorsuch (1983, cited in DeVellis, 2012), and Kline (1979, cited in DeVellis, 2012) recommending at least 100 participants, and Cattell (cited in Zoski & Jurs, 1996) recommending at least 250. Others contend that it is the subject to variable ratio, or *p*, that is important, with Hatcher, Barends, Hansell and Gutfreund (1995) recommending that the number of subjects should be 5 times the number of variables, or 100, whichever is the larger, and Garson (2008, cited in DeVellis, 2012), suggesting 10 subjects per item. Based upon these assertions, the TASCA would need to have been completed by many more participants. For this reason factor analysis was deemed inappropriate.

5.3.2.2.7. Reliability

The preliminary reliability analysis suggested that the TASCA was a highly reliable instrument. However, Schmitt (1996) cautions that Cronbach's alpha is not a good measure of a scale's uni-dimensionality (measuring a single concept) as is often assumed. Thus, when developing a scale from scratch, the researcher should first run a factor analysis, to assess the uni-dimensionality of the scale before carrying out a reliability analysis, to assess the internal consistency of the item scores on the scale (Schmitt 1996). Sijtsma (2009) argues that Cronbach's alpha can be overestimated as an indicator of reliability, however, DeVellis (2012) argues for its utility, being widely used by researchers, and having strong conceptual linkage to other

indicators of reliability. It was therefore felt to be appropriate within this exploratory study.

5.3.2.2.8. Next steps

After item analysis and further piloting and dissemination of the reduced survey, a domain specific standardised scale to examine TA SE in relation to ASD (Brouwers & Tomic, 2001; Higgins, 2009) could be produced.

5.3.2.3. Phase 3: What SE beliefs do TAs report in relation to supporting pupils with ASD?

The TASCSA identified those who gained high and low scores in relation to their perceived SE in supporting children with ASD. 4 semi-structured interviews (SSI) were then carried out.

5.3.2.3.1. Sampling

The highest and lowest scoring participants who had answered “Yes” to the request to take part in an interview at a time and place to suit themselves, were identified via SPSS® 23.0, based on the TASCA online survey. Non-generalisability of this opt-in sample is therefore acknowledged as identified above.

Since participants opted-in to the process by providing their contact details within an optional section of the survey, one might assume that they were happy to engage with further discussion, and not be anxious about the potential areas being explored (Edwards et al., 1997).

Issues of power in qualitative research were considered. Answers in relation to this are dependent upon methodological and epistemological perspective (Brannen, 2005). Mason (2002) identifies the need to build a convincing analytical narrative based on richness, complexity and detail rather than on statistical logic. Since this was exploratory, “real world” research (Robson,

2011), with outside determinants and constraints, a sample of 4 was deemed adequate. On reflection, a larger sample might have enabled clearer distinctions to be drawn between high and low scoring respondents in relation to Bandura's (1997) four sources of information.

The researcher was careful not to make inappropriate inferences from the sample utilised (Bryman 2012; Onwuegbuzie, Leech & Collins, 2010).

5.3.2.3.2. Process

Research should contain sufficient methodological detail to allow reproduction of or comparison with similar studies (Bird & Schjoedt, 2009). In a review of methodological issues in research papers, Hawkes and Rowe (2008) found that most studies using semi-structured questionnaires lacked specific information on the wording and phrasing of questions, leading them to ask whether one could be sure that differences identified in perceptions were due to the differences between participants, or in the framing of the questions. In order to overcome this, detail on methodological features such as response format (i.e. open or closed questioning), mode of delivery, sampling technique and response rate has been provided in this research.

Standardised procedures and conditions were implemented in order to reduce experimenter effects within this phase of the research (Hayes, 2000). Ethical issues have been identified within studies that involve interviews (Hayes, 2000) and were carefully considered by the researcher prior to the activity. These included the topic, the competence of the interviewer to explore this, and issues such as power and status.

Using open-ended questions was a successful way to enable participants to speak at length. Applying the prepared interview protocol flexibly helped the researcher to adhere to the topic whilst incorporating participants' responses.

The researcher remained within her own professional competence throughout the tasks. A relaxed and friendly manner was used to support participants to contribute fully. Guidance from The Code of Ethics and Conduct (British Psychological Society, 2009) including gaining informed consent and explaining the use to which the data would be put, was fully followed.

5.3.2.3.3. Data analysis

When organising focus group and semi-structured interview data, thematic analysis was utilised to create themes (Braun & Clarke, 2013). The decisions made within the process of analysing quotes to identify possible codes, and naming themes can lend itself to researcher bias.

Alternative modes of analysis were considered as outlined within the methodology, but felt to be less appropriate in relation to the purpose of this study.

5.3.2.3.4. Validity

Following guidance from Robson (2011), measures were taken to address issues of validity. All interviews were digitally audio-recorded; orthographic transcription ensured accurate recording of information; awareness of influence as a researcher was maintained in order to reduce bias when interpreting data, and reflexivity was maintained.

5.3.2.3.5. Limitations

Qualitative approaches rely upon the relationship developed between the interviewer and the participants in order to gather high quality data (Ritchie & Lewis, 2009). The onus is on the researcher to develop an effective dynamic, however, such relationships have been described as “faking friendship” (Duncombe & Jessop, 2003, p.108) with the contention that it represents

naivety to ignore the equalities of power that such a relationship has upon the research process. This contention was understood by the researcher and a professional manner was maintained throughout the task.

The fact that SSI is a co-construction method, with the interviewer and the interviewee being contributing participants was also held in mind during the SSIs, although this issue has been disputed among researchers (Mann, 2011).

5.3.3. Reflexivity.

“Reflexivity requires an awareness of the researcher’s contribution to the construction of meanings throughout the research process, and an acknowledgement of the impossibility of remaining ‘outside of’ one’s subject matter while conducting the research” (Willig, 2008, p.10). A reflexive approach to this research was thus adopted.

Awareness of the influence of the researcher upon the data generated was maintained throughout the study. The researcher had experience in addition to being reflexive in maintaining appropriate boundaries with regard to role (Patton, 2002), thus should have been ethical and effective. Power and status were fully considered. Status was known by default via communications with head teachers, and within the introduction to the TASCA. The impact of this is unknown, and could have had either a positive or negative impact upon recruitment, engagement and responses.

The researcher was aware of unintentional influence on participants to take part, some having been previously invited to or attended training and programmes run by the researcher. Despite this, the sample pool was wide and many participants would not have had any prior knowledge.

Within focus group and SSI phases, the researcher was aware of the way in which positionality could be shifted, rather than remaining fixed. This reflects

what has been described as the emicetic balance (Eppley, 2006, cited in Berger, 2015), that is to say, capturing the viewpoint of the person who lived the experience (emic) and gaining understanding as an 'objective' outsider. As a researcher one therefore has to update one's own position relative to the study and be flexible in being open to new interpretations and possibilities.

The researcher acknowledges that she has had an ongoing and keen interest in all areas of the research study, thus the lens provided by the expert panel was of great value. Given the nature of the research it is acknowledged that a different researcher might provide different meanings and outcomes within the context (Horsburgh, 2003).

5.3.4. Responsivity.

Despite significant prior planning, responsivity took place during the research process and amendments submitted to the ethics committee. The research sample was broadened after phase 1, to widen the possible participant population from one quadrant of a LA to the whole LA.

5.4. Summary of findings

- The role of the TA supporting pupils with ASD is wide-ranging and not explicitly-defined.

- TAs take high levels of responsibility for tasks one might deem to be teacher responsibilities.

- The perceived deficits in teacher knowledge and skill identified by TAs mean that these staff members are unable to provide the type of feedback which might support the development of TA SE.

- Increased clarity and opportunity in terms of the TA role in relation to the parent needs to be agreed and implemented within settings.

- TAs assume the role without a clear programme of induction or training being available, despite willingness to train in their own time.

- Given the domain-specific nature of SE judgements, TAs who felt successful with one pupil with ASD would not necessarily have SE in relation to a different pupil with ASD due to heterogeneity of needs.

- In order to appropriately utilise TA support, schools might consider targeting TAs towards particular tasks based upon TA SE in relation to the task.

- Models of individual and peer supervision strategies need to be explored further, particularly in relation to the possible impacts upon SE. Time needs to be available and cover provided for TAs to access regular supervision opportunities.

- The school as an organisation needs to support the development of all staff in SE in relation to ASD to support effectiveness, job satisfaction and the ability to cope with the demands of the role.

- Continued research into SE in relation to school professionals represents an opportunity to understand how best to provide quality educational services to pupils with ASD.

5.5. Conclusion

In this chapter, the findings from the 3 phases of the research have been discussed in relation to the construct of SE, specifically the four sources of information identified by Bandura (1997) and related to relevant studies. Limitations of the research have been provided. The conclusion is presented in Chapter 6.

Chapter 6 – Conclusion

6.1. The self-efficacy of teaching assistants supporting pupils with autism in mainstream primary schools

Three research questions were answered using a mixed methods approach to examine SE of TAs supporting pupils with ASD. Using quantitative as well as qualitative methods, provided rich data.

The study developed a measure of SE designed specifically for TAs supporting pupils with ASD. Because SE is specific to a particular task and affected by the demands of a given situation (Bandura, 1986), availability of an instrument incorporating the variety of tasks required of TAs supporting pupils with ASD is likely to provide a sensitive and nuanced measure of SE.

The SSI data were analysed in relation to Bandura's four sources of information. The theory appeared explanatory in relation to SE development for TAs, and allowed useful next steps to be determined. Analysis did not seek to, and thus does not discriminate the differential strengths of the sources of information, however, all sources appeared pertinent in examining and explaining TA SE. In addition there was significant value in having a framework from which to consider how change in SE might be effected.

The school as a system appeared crucial in setting the agenda for TAs in relation to clarity of role and opportunities for training and support, in addition to more widely being supportive of, or presenting barriers to inclusion. Since SE sits within social cognitive theory, it is possible to shift analysis from an individual to a collective sense of agency. The value of the construct of collective efficacy as a framework within which the sources of information come into play merits further consideration in relation to TA SE in relation to supporting children with ASD. Such an approach would enable the contextualised nature of TA SE to be acknowledged.

6.2. The practical implications for the practice of educational psychology are considered.

This research leads to recommendations for EP practice at a range of levels.

Systems level

- The definition of TA role in relation to pupils with ASD requires clarification. EPs are able to carry out research at the level of the system to support the organisation to examine current perceptions and to effect change, using approaches such as soft systems methodology (e.g., Checkland & Poulter, 2010).

- EPs are able to support the development of, and contribute to clear induction processes for TAs and teachers supporting a pupil with ASD. Competency frameworks for TAs supporting pupils with ASD would support this work.

- Using “consultative training” (Higgins & Gulliford, 2014) within a social cognitive model (Komarraju, 2008) would ensure that EPs are improving both subject knowledge and SE. Joint training would enable staff to work together as a team and might provide valuable liaison and problem-solving opportunities.

- Participatory teacher research can foster meaningful professional development for teachers (Cochran-Smith & Lytle, 1999). EPs might work with teachers and TAs to critically examine and evaluate their interventions, allowing them to actively participate in the development of knowledge about approaches that work, and those for which no evidence is found.

- The ELSA programme provides a model of training with contracted supervisory opportunities for TAs. Such a model might be developed in relation to providing training and support for TAs supporting pupils with ASD.

- EPs discussions with schools on production of an EHC plan would allow consideration of the skills and tasks required of the prospective TA. Given the high level of specificity of individual pupil needs, and requisite TA skills, this might support recruitment, development and retention of the TA.

- EPs could usefully engage in consultation and training with senior management teams in schools highlighting the organisational benefits of improving staff SE levels.

Group level

- In order to support vicarious opportunities to develop SE, EPs could coordinate shadowing and observation of capable TAs within federations of schools.

- EPs are involved in a number of approaches which offer follow-up support and supervision to TAs who have attended training; solution circles (Forest & Pearpoint, 1996, cited in Brown & Henderson, 2012) can be a powerful tool to support group problem-solving in these sessions and can be handed over to TAs as an approach to structure peer support sessions.

Individual level

- Individuals are more likely to feel competent when they are not experiencing strong aversive arousal. Strategies that provide emotional support for TAs can be offered by EPs in schools.

Mentoring or coaching by highly credible and persuasive individuals might be supportive to the development and maintenance of SE.

- Specific strategies to support high arousal and anxiety might include mindfulness (e.g., Kabat-Zinn, 2003), including mindfulness-based stress reduction (MBSR) (e.g., Grossman, Niemann, Schmidt & Walach, 2004) and emotion coaching (e.g., Gottman, Katz & Hooven, 1997).

- Bandura (1997) cautioned that positive changes in SE only come through "compelling feedback that forcefully disrupts the preexisting disbelief in one's capabilities" (p. 82). Approaches such as video assisted feedback (e.g., Video Enhanced Reflective Practice (VERP), Birbeck, Cartwright, Ferguson, Satariano et al., 2015), might be of value in enabling such reflection.

- Cognitive modelling, where the model narrates the thoughts behind the behaviour, have increased SE in pre-service teachers (Gorrell & Capron, 1990) and might prove an appropriate intervention for EPs to use with TAs.

6.3. In the light of the results obtained additional questions meriting further research are identified.

Professional practice should be based on careful analysis of the evidence (Cline, 2012). If teacher efficacy is the powerful predictive construct it has been thought to be, then research examining TA SE is similarly crucial particularly since there is clear research evidence to indicate the significant role that TAs play in supporting children with complex needs.

- It is felt that the TASCA is a domain specific SE measure with promising early evidence of reliability and validity. It would be a useful

next step to make amendments according to the statistical findings and limitations identified within this study, and utilised with an increased sample size. It could then be used for pre and post intervention evaluation, and to identify patterns of need in relation to TAs supporting pupils with ASD in particular cohorts.

- It is suggested that the construct of collective efficacy might prove enlightening in examining the SE of TAs in relation to supporting pupils with ASD, thus further analysis of school context (including climate and issues of support and inclusion) in relation to SE warrant consideration.

- Identifying the sources of variance of TA SE, and developing an understanding of how high SE is maintained over time would further elucidate the construct and support the development of targeted approaches in schools.

- Clear gaps within the literature exist in relation to the emotional demands placed upon TAs who support children with additional needs, thus further research is indicated.

- Assessment of the impact of role and identity upon TA SE warrants further exploration.

6.4. Unique contribution to the discipline

This research aimed to address an identified gap within the literature in relation to TA SE in relation to ASD. Previous research addressed the SE of teachers of children with autism (Dimopoulou, 2012; Ruble et al., 2013), or

TAs (Higgins & Gulliford, 2014); however, the TA who is often at the heart of the task had not been the focus of any published studies.

On the basis of extant research and the TA voice via focus group interview, a preliminary TA SE questionnaire was created. This merits further development. As a standardised scale, the TASCA could be utilised to assess links between SE and measures such as impact of training, job satisfaction and support.

The four sources of SE proposed by Bandura (1997) were considered in relation to the qualitative data gained, with the theory felt to provide a valuable framework for analysis and future planning.

The small scale findings of the current study add knowledge and insight to the scarce research in relation to the self-efficacy of teaching assistants who support children with autism spectrum needs. The researcher thus believes that the assertion that: “the primary goal of research is, and must remain, the production of knowledge” (Hammersley & Atkinson, 1995, p.17) has been met.

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Appendices

Appendix A: Research timeline

Activity	Date
Risk assessment	23.11.15
Ethics committee	10.15
Letter to head teachers re-focus group	7.12.15
Reminder email to head teachers	6.1.16
Reminder email to head teachers	15.1.16
Focus group meeting	5.2.16
Focus group transcription	19.2.16-26.2.16
Focus group analysis	26.2.16-26.3.16
Ethics committee – revisions	7.3.16
Survey design	26.3.16-19.4.16
Meeting with expert panel	13.4.16
Dissemination of survey to expert panel	20.4.16
Returns from expert panel	30.4.16
Dissemination of survey to schools	1.5.16
Reminder email to head teachers	10.5.16
Reminder email to head teachers	18.5.16
End of survey	1.6.16
Invitation of TAs to structured conversation	10.6.16
Structured conversations	20.6.16-20.7.16
Transcription of structured conversations	21.7.16-6.8.16
Thematic analysis	7.8.16 onwards

Appendix B: Gatekeeper letter to Head Teacher

Dear Head Teacher,

I am carrying out research in relation to my professional doctorate in the School of Psychology, Cardiff University, exploring Teaching Assistant (TA) SE in relation to supporting children with Autism Spectrum Disorder (ASD) in mainstream primary schools.

I am writing to all head teachers in the county to ask whether you would be willing to permit the recruitment of Teaching Assistants to a focus group. This task will be carried out to help me to modify items for a questionnaire which can then be used with TAs across the county. The teaching assistants will need to have experience of supporting a pupil with ASD in the primary classroom, and might have attended EarlyBird Plus or Cygnets training. To this end, I would be grateful if you could disseminate the attached information sheet for any such TAs who might be interested.

The focus group will be carried out locally on a date to be agreed, and will last approximately 1.5 hours. Refreshments will be provided. Involvement in the project is entirely voluntary, and participation can be withdrawn at any time. Travel expenses up to £10 per participant will be reimbursed on the day.

All data collected will be coded and stored anonymously in a safe and secure place. On completion of the study, the data will be destroyed.

I will follow up this request with email and/or telephone contact to gain names, telephone numbers and emails of staff who might be interested.

Many thanks in advance for your consideration of this project.

With kind regards,

Louise Lombardi

Supervised by Dr Kyla Honey, School of Psychology, Cardiff University. Tower Building. 70, Park Place, Cardiff, CF10 3AT. 02920870360

If you have any complaints please contact: The Secretary of the Ethics Committee, School of Psychology, Cardiff University, Tower Building, Park Place, Cardiff CF10 3AT. Tel: 029 2087 0360.

Appendix C: Information sheet for Teaching Assistants

Invitation to take part in research!

I am currently carrying out research exploring Teaching Assistant's (TA's) beliefs in their ability to support children with Autism Spectrum Disorder effectively. This is in relation to my professional doctorate in Educational Psychology at Cardiff University.

As part of this work I am very interested to hear the views of TAs who are currently supporting children with Autism Spectrum Disorder in primary schools. They might also have attended the EarlyBird Plus or Cygnets course. This will help me to modify an existing questionnaire, which can then be used with Teaching Assistants across the county.

During this part of the research I will be carrying out a focus group with Teaching Assistants who have experience of supporting a pupil with ASD in the primary classroom. Participation is voluntary. Taking part will provide a great opportunity to give your views in relation to what helps you to support children with ASD effectively and will feed into the new questionnaire.

I will arrange this at a time and place, which I hope will be suitable for participants, and will provide refreshments. It will take about an hour and a half. Travel expenses up to £10 per participant will be reimbursed on the day.

This project has been reviewed and ethically approved by the School of Psychology, Cardiff University. Any information provided will be held confidentially, and the data will be anonymised at the end of the study. As a participant you are able to ask for the information I provide to be deleted/destroyed at any time up until the data has been anonymised and will have access to the information up until this point. Data will be destroyed after it has been transcribed.

Please let your headteacher know if you would like to be part of this study. I will contact the school within the next few days to gain names and contact details of interested staff.

Thankyou for taking time to read this information.

Louise Lombardi

Supervised by Dr Kyla Honey, School of Psychology, Cardiff University. Tower Building. 70, Park Place, Cardiff, CF10 3AT. 02920870360

f you have any complaints please contact: The Secretary of the Ethics Committee, School of Psychology, Cardiff University, Tower Building, Park Place, Cardiff CF10 3AT. Tel: 029 2087 0360.

Appendix D: Email to Teaching Assistants who have agreed to participate in the focus group.

email address:

Dear (name),

Many thanks for agreeing to take part in a focus group activity, which I am carrying out as part of my research at the School of Psychology, Cardiff University. This research is looking at Teaching Assistant's beliefs in their ability to support children with Autism Spectrum Disorder effectively. It will be an opportunity to contribute to a group discussion with other teaching assistants. Your contributions will be anonymous and you will be able to withdraw your contribution at any point until the information is anonymised.

The focus group will be held at (location) on (date) at (time), and will last for about an hour and a half. I will provide refreshments. Travel expenses up to £10 per participant will be reimbursed on the day.

Please could you let me know by return of email whether this is a possibility for you?

Many thanks,

Louise Lombardi

Appendix E: Focus Group confirmation letter

Dear (name),

Thank you for agreeing to participate in the focus group that I am holding on [date] at [time] at [location]. Enclosed with this letter is a map and directions that show you how to get to [location]. We will be meeting in room .

As I explained in our recent telephone call, the purpose of this focus group is to learn about your experiences. You will be part of a group of seven or eight people who are all TAs in a primary school, and supporting children with ASD. We know that people have many different experiences and are very interested in hearing your thoughts on the subject.

The focus group will begin at [time] and end at [time] on [date]. We know how valuable your time is and we will respect everyone's schedules by starting and ending promptly. Please allow yourself enough time to reach [location] by [time]. Refreshments will be provided. Travel expenses up to £10 per participant will be reimbursed on the day.

If you arrive and decide not to participate in the discussion, that is entirely acceptable.

We will be tape recording the discussion so that we can keep a careful record of what people say. However, we will destroy the tape as soon as we have made complete notes of the meeting, and we will not use your real names in preparing the notes.

All of the information you tell us will be kept confidential.

We are glad you have agreed to participate in this group, and are eager to hear from you about your experiences. If you have any questions or cannot

attend the meeting for any reason, then please call me at [phone number] as soon as possible.

I look forward to meeting you on [date]!

Yours sincerely,
Louise Lombardi

Supervised by Dr Kyla Honey, School of Psychology, Cardiff University. Tower Building. 70, Park Place, Cardiff, CF10 3AT. 02920870360

If you have any complaints please contact: The Secretary of the Ethics Committee, School of Psychology, Cardiff University, Tower Building, Park Place, Cardiff CF10 3AT. Tel: 029 2087 0360.

Appendix F: Demographic data form for focus group participants

Please complete the information below to help me to classify your responses and analyse them statistically: tick the relevant box.

1. What is your gender
2. What is your age range?
3. What is your marital status?
4. How many children do you have?
5. What is your highest level of education?
6. What is your job title?
7. How many years experience do you have as a TA?
8. How many years have you worked with children with autism spectrum disorder (ASD)?
9. Do you support a child who has a Statement of Special Needs or Education Health Care Plan (EHCP)?
10. Have you completed EarlyBird Plus training?
11. Have you completed Cygnets training?
12. Have you completed any other ASD specific training, eg AET training? Please detail here.

……

……

……

……

13. Do you have protected planning and liaison time with the class teacher? Y/N

……..

14. Do you feel that the demands of your work are clear? Y/N

Comments:……
……
..……

15. Do you feel that your work is valued in the setting? Y/N

Comments:……
……
……
Thankyou

Appendix G: Demographic data for focus group participants

Participant	TA1	TA2	TA3	TA4	TA5	TA6	TA7	TA8
Gender	f	f	m	f	f	f	f	f
Age range	41-50	51-60	25-30	41-50	51-60	41-50	41-50	31-40
Marital status		married	single	married	married	partner	married	married
Children	1	3	0	2	2	2	2	3
Highest level of education	NVQ3	State enrolled nurse	A level	BAHons	Level 3 TA	BA Hons	BA Hons	A level
Job title	TA (Speech and Lang)	HLTA	TA	SEN TA	Senior TA	LSA	LSA and ELSA	SEN TA
Years' experience as TA	10	16	5	8	20	1	6	3
Years' experience ASD	8	16	2	5	20	1	2	3
child on EHCP	Y	Y	N	Y	N	Y	Y	Y
EB/EB+	N	Y	N	N	Y	N	N	N
Cygnets	N	N	N	Y	N	N	N	Y
other ASD training	TEACCH	TEACCH	N	AET 1, 2 and 3	N	N	N	AET 1 and 2
Protected liaison with teacher	N	Y	Y	Y	Y	Y	Y	Y
Are demands of work clear?	Y	Y	Y	Y	Y	Y	Y	Y
Is your work valued?	Y	Y	Y	Y	Y	Y	Y	Y

Appendix H: Focus group preparation

Schedule for focus groups
Date
Location
Time
Moderator
Note taker

Arrive at location
Set up
Meet and greet with refreshments and snacks
Focus group participants will be informed that the session will be audiotaped. LL will bring the tape recorder and microphone for the two sessions.

We will ask participants to write the name (first name only) that they would like to be referred to during the session on the name card. Participants should be reminded that their names will not be used in the written reports.

Supply checklist:
Blank name tags (8)
Introductory script
Background information sheet (8)
Consent forms (8)
Debrief forms (8)
Tape recorder (uses two AA batteries)
AA Batteries, for microphone and recorder (6 total — 3 in use, 3 extra)
Food for 8 people
Soft drinks/ water for 8 people
Paper cups
Travel expenses

Appendix I: Focus group procedure

Welcome

Prior to the focus group the chairs are placed in a circle and refreshments are provided.
Welcome the group and thank them for attending. The moderator will distribute the consent form and the background information sheet, asking the participants to read and then sign it and complete the background sheet. The notetaker will collect the consent forms and the background sheets. Those who decline to participate will be dismissed before beginning the actual group discussion.
Research team is introduced and roles are described i.e. moderator and note taker.

Overview of topic

Remind the group of the research, which is being carried out i.e. to explore Teaching Assistant's beliefs in their ability to support children with Autism Spectrum Disorder effectively.

Highlight the commonality of the group and remind the group that they are all here because….

Explain that the researcher is now interested in finding out the groups views about supporting children with ASD.

Briefly explain the process of a focus group:

Participants will be asked a series of questions. The lead is not going to ask each person individually. Participants should join in when they have something to say. Explain that everyone's input is important and that the researcher is interested in hearing from all members of the group.
Explain that there are no right or wrong answers so members should feel free to express their views even if they differ from other group members.
State that all views will remain anonymous but will be recorded using audio equipment to make sure that views are heard exactly. Clarify that everyone is happy with this.

Ground rules

State that all information will be confidential and used only for research purpose. Only first names used in the discussion and recording will be stored in a secure locker at the EP office.
Remind the group that their participation is voluntary.
Respect the views of others.
Only one person talking at once.

Appendix J: Informed consent – focus group discussion

School of Psychology, Cardiff University

Consent Form

I understand that I am being asked to take part in this project, which aims to explore Teaching Assistant's beliefs in their ability to support children with Autism Spectrum Disorder effectively.

I understand that my participation in this project will involve me taking part in a focus group activity lasting approximately one and a half hours, to be held locally.

I understand that my participation in this study is voluntary and that I can withdraw from the study at any time without giving a reason.

I understand that I am free to ask any questions and discuss my concerns with the researcher Louise Lombardi, at any time.

I understand that the information provided will be held confidentially, so that only the researcher can trace this information back to me individually. I understand that my data will be anonymised at the end of the study and that after this point it will be impossible to trace my information back to me. I understand that I can ask for the information I provide to be deleted/destroyed at any time up until the data has been anonymised and I can have access to the information up until the data has been anonymised. I understand that this data will be destroyed after transcription is complete.

I also understand that at the end of the study I will be provided with additional information and feedback about the study.

I, …… give consent to participate in the study conducted by Louise Lombardi, supervised by the School of Psychology, Cardiff University.

Signed: ……

Date:……

Louise Lombardi

Supervised by Dr Kyla Honey, School of Psychology, Cardiff University. Tower Building. 70, Park Place, Cardiff, CF10 3AT. 02920870360

If you have any complaints please contact: The Secretary of the Ethics Committee, School of Psychology, Cardiff University, Tower Building, Park Place, Cardiff CF10 3AT. Tel: 029 2087 0360.

Appendix K: Focus group introductory script

Hello everybody. Thank you for coming today - your time and effort are much appreciated. My name is LL, and this is XX (Note taker). Today we are meeting with you to find out about your experiences of supporting children with Autism Spectrum Disorder (ASD) in mainstream primary schools. The best way for us to do this is by talking to people like yourselves who have experience in this area. In our discussion today we will talk about these experiences.

We are collecting information to help us to modify a questionnaire for all TAs who are supporting children with ASD. We hope that you will feel comfortable in sharing your experiences with us, and are keen to hear all points of view during the session. There are no right or wrong answers, so please contribute as fully as you can. I have a list of questions to ask you, but feel free to add other things that you feel are important as we go along.

The information you give us will be kept in the strictest confidence.

Please respect the others in the group and do not repeat anything you hear in this discussion.

This session will be recorded and [name] will be taking notes. We will not use your names in preparing any reports and will disguise your comments so that no one can identify who made specific remarks. After the report is written, we will destroy all notes from this meeting.(refer to consent form information).

As the moderator, my role here is to ask questions and listen. I won't be participating in the conversation, but I want you to feel free to talk with one another. Everyone's participation today is important to us and we will ensure that everyone has an opportunity to speak. So, if one of you is sharing a lot, I may ask you to let others talk. And if you aren't saying much, I may ask for your opinion.

We've placed name cards on the table in front of you to help us remember each other's names. Let's begin. Let's find out some more about each other by going around the table...(move into intro question).

Appendix L: Focus group questions and moderator prompts

Engagement:

Opening question

Can you tell us your name and what your role entails at the moment?

Introductory question – to begin topic discussion

- Tell me about supporting children with ASD in primary schools?

Exploration:

Transition question(s) – to move conversation into the key questions

- How have you learned about the role?
- What has helped you in your role?
- What challenges have you encountered?/
- In your view, what are the most pressing issues for a TA in this role?
- Describe the "typical" issues you've encountered.
- What kinds of help have you needed, but haven't received? Why not?
- What are some possible ways the school/ professionals/ family could help? (Brainstorm).
- What advice would you give to other TAs in this situation?

Exit:

Ending question(s) – to close the discussion

- "all-things-considered" question – allow participant to reflect on discussion
- summary question – after moderator quickly summarizes discussion, participants invited to make sure summary is correct
- final question – ensure that nothing has been missed, or for the moderator to get feedback

Examples of moderator prompts for all questions:

To clarify...

Right so...

So by that you mean...

Have I got that right?

[Repeating response given]

[Giving a similar related example to ensure interviewer understanding]

Examples of probes for all interview questions:

Oh really?

[Reflecting response given as a question]

Can you tell me more about that?

Can you give me an example of that?

What did you think about that?

How did you feel about that?

How was that?

That's a particularly interesting (comment/response).

Could you explain that further? Can you describe what you mean? Could you give us an example?

Close. Thank the group members for their involvement. Reimburse travel expenses.

Appendix M: Focus group interview debrief form

Study Title: Exploring Teacher Assistant SE in relation to supporting children with Autism Spectrum Disorder

Thank you very much for your participation in this study.

About this Study:

The intention behind the proposed study was to explore Teaching Assistant's beliefs in their ability to support children with Autism Spectrum Disorder (ASD) effectively.

Teaching Assistants contributed to a focus group discussion to enable me to modify items for a SE questionnaire. This questionnaire will be piloted and more widely distributed to gain an idea about how capable teaching assistants feel in supporting children with ASD.

Some of those who complete the questionnaire will be invited to a discussion with the researcher to look at the issues in more depth.

It is hoped that the information gained from this piece of research will help us to support TAs to feel more effective in working with pupils with ASD.

The data in this study is held confidentially. You have the right to withdraw your data without explanation and retrospectively up until (Date) at which point the interview data will be anonymised.

If you have any questions, or would like to know more about this research, please contact the researcher or supervisor as below:

Louise Lombardi

Supervised by Dr Kyla Honey, School of Psychology, Cardiff University. Tower Building. 70, Park Place, Cardiff, CF10 3AT. 02920870360

If you have any complaints please contact: The Secretary of the Ethics Committee, School of Psychology, Cardiff University, Tower Building, Park Place, Cardiff CF10 3AT. Tel: 029 2087 0360

Appendix N: Thematic analysis of focus group data – further exemplars

Theme 1.1: Attunement
Subtheme 1.1(a) We enter the child's world
TA1: Dangles went everywhere. And by year 6 he was this half empty, threadbare monkey. But he would be communicated through - so she would sort of use him to display her emotions and things. So I also spent half my time talking to a stuffed monkey…
TA1: I mean, we had great success with all these children, getting them involved with everything, in one way or another
TA1: but I'd get her out of whatever mood she was into
TA1: Take an interest in their interest - because then you've got something to, you've almost got something to use…
Subtheme 1.1(b) We are the responsive adult
TA1: On the same page, or there's no point then coming down like a ton of bricks.
TA6: …teacher has 30 other children to look after, you have one, and they know that you obviously know the child more than the teacher does…
TA6: but on the other hand, you're doing what's best for the child and you think, well actually, teacher's not - and that sounds awful, but the teacher's not ……...TA3: They're so busy, they've got so much to do now that actually you're almost better to say, I've got them, look. I've got them and I'll take them and do this and this and this with them…….?: Yes…….TA3: because you're tuned in aren't you, you know…TA6: yes……TA2: because you're tuned in…….TA3: You'll do what's necessary
Subtheme 1.1(c) We are child-centred
TA3: They're so busy, they've got so much to do now that actually you're almost better to say, I've got them, look. I've got them and I'll take them and do this and this and this with them...because you're tuned in aren't you, you know…
TA2: And it's learning where where to pitch it. But you have to be both, for it to work
TA1: …it was being able to identify things that made her feel comfortable, and use those to sort of, I suppose, mange her moods and manage the situation in the classroom……TA2: Yes, yes…..TA2: so to bring things back on track?…….TA1: Yes bring it down, bring it back on track so that she felt comfortable……
Subtheme 1.1(d) We support emotional development
TA2: I underestimated the degree of emotional support..... I find my focus is actually lot on friendships and joining in, self esteem and being part of school in all the ways a child is part of school
Theme 1.2: Negotiating the Social World

Subtheme 1.2(a) We are the mediator
TA1: you sort of end up mediating between these children, so there was a lot of 'okay then if you don't want to play it like that, why don't you go and play with…?"
TA6: as the teacher says something, you sit there and think "did you really have to say that?"
Subtheme 1.2(b) We help children to manage the social world
TA2: I find my focus is actually lot on friendships and joining in, self esteem and being part of school in all the ways a child is part of school – not just the learning. That has been more of the role than I thought it might be actually, but it's a part that I love so…
TA6: I have done programmes for social skills, run little groups…..
?: Always a crucial one!.....?: sounds familiar.....?: very familiar
TA5: ELSAs at our school, they've kind of set up the programmes that we've done, looking at friendships, empathy, just trying to think….turn-taking
TA3: Our social skills in our centre start at 9 o'clock when they come in until quarter past 3…!
TA1: and initially some of them when they come in don't talk at all, but yes I think we're getting there – now we're having to keep them quiet!
TA1: … we can see who's chatting and who's not, what they talk about, and encourage them to talk about things.
TA1: We take ours out to go to the park for instance and go and buy drinks, or food or whatever, then they have a little area that they sit in and do their thing so that we can see who's chatting and who's not, what they talk about, and encourage them to talk about things…..They hand out fruit and tend to just chat amongst themselves and stuff, and initially some of them when they come in don't talk at all, but yes I think we're getting there – now we're having to keep them quiet!
Theme 1.3: Getting things done
Subtheme 1.3(a) We help children to complete tasks
TA5: Well because he's in year 3 and we're trying to encourage independent learning and he had been doing ok and then when he gets the hump a couple of times I've had to say, "you know I'm still on the same table and you're doing all your work and I'm just checking everyone else is doing as well as you're doing but yes, sometimes it can cause difficulty.
TA2: it depends what the activity is I find. If I know it's something she's going to struggle with, I know that I'll just have to make myself not as available to everyone else because otherwise it would just be chaos. There are some things in my case, anything creative, I know she's happy as Larry, she'll do the task, she'll enjoy the task, and I don't have to worry about that quite so much

TA6: You are really good at it – I want you to show me just how good you are. And she was quite happy to sit and get on with it ?: Yeah (yeah yeah yeah) ?: Not bribery but they're happy with that, they love it *?: You flattered her into it – but that worked.*
TA6: There was one where he, if they'd done three bits of work well, you could…. Whack on a smiley face. TA1: put on a smiley face…
Subtheme 1.3(b) We enable positive outcomes
Subtheme 1.3(c) We have to share our time
TA5: when he gets the hump a couple of times I've had to say, "you know I'm still on the same table and you're doing all your work and I'm just checking everyone else is doing as well as you're doing but yes, sometimes it can cause difficulty.
Theme 1.4: Managing non-cooperation
Subtheme 1.4(a) We look for triggers
TA2: Just being one step ahead if you can. Watching for triggers that like…
TA1: Anything that could distract from whatever the problem was
TA2: It's a lot about distraction actually the whole day!
Subtheme 1.4(b) We pre-empt challenging situations
TA7: One thing that's worked really well with our boys is letting them know in advance if you know that something's going to happen, like this afternoon, is changing…..TA5: I was telling mine about today – "I'm not in school…".
TA2: we quickly, you know, found a quiet corner for her, and actually now we don't need to be in a separate room
TA1: at playtimes, they can get very worked up, through noise and I think overstimulation outside, so we used to bring them in for the last bit
TA5: We've got so many rooms you see - the centre's quite big so if it's distracting here they can go into the other little room - and they can be quite loud - so close the doors!
Subtheme 1.4(c) We use strategies to manage behaviour
TA1: Quite often the computers were used, sort of as the carrot on the end of the stick… 'you go and use the computer and they can carry on playing the game.' Or, you go and do something that I know you're going to enjoy, they can play with that and that will stop any arguments.
TA6: I used to spend, I don't know, probably half the day outside in the corridor, first of all fighting him in the corridor, I mean physically fighting him, I mean I've done a proper course and everything on how to handle…
TA6: …the bit that gets you is that you're on this thing about stopping this child because he's running out shrieking and shouting- believe me he knew more words in year one – bad words to say than I have ever heard in my entire life

Theme 1.5: We use ASD-specific strategies
Subtheme 1.5(a) We are alert to issues around change
TA1: Their social stories, I think they're really proud of them
TA6: I took G for a PGL weekend, or for moving on to secondary school, and with a little boy that I was with last year, he was so proud of them and asked permission to show his friends, and umm, yeah so I think they really do work because it's something that they have, like a security blanket…
TA6: I don't want to have to pick up the pieces after
TA1: you can put that on there, or however you phrase it, you can put that on there and that will prompt them to go oh, what's that, and you can explain it, and they're ready for it then in the morning, or whenever it is, and so it's sort of using these resources to pre-empt, throughout the day, anything that might cause difficulty.
TA4: well PPA time is a nightmare anyway with three different lessons in the afternoon, but to suddenly have another person standing there is, to them, it's the most frightening thing ever. It's not like people thing, ah well, what can I do to upset this one, they just go in completely upset if they go in at all.…
TA5: If you split the day, and you're concentrating on the English and the Maths, so you are doing the same thing. I think if you start saying you do three mornings and then you do 2 afternoons, the child doesn't understand it, I think you can get all confused
Subtheme 1.5(b) We modify our language
Subtheme 1.5(c) We use sensory strategies
TA1: …noise, so erm ear defenders we've had, so on the coach we had ear defenders…..TA6: School dinners we had ear defenders…….TA6: again on the same school trip we had headphones, so she listened to music, erm so that was to keep her calm on the coach.
TA5: Exercises - we take her out 'cos we've got monkey bars - we've got lots of climbing in the playground, so when he used to go off for his breaks or was getting a bit twitchy he'd go out for a climb for a couple of minutes and then come back into the class.
TA2: They do lifting weights, and rolling up in blankets, marching round the school with her backpack full of weights, that kind of thing.
TA5:We (found a) quiet corner for her, and actually now we don't need to be in a separate room but we've brought her into colouring club but she has her own table, and her own pens, and that's it and that's done - but now she can cope with the noise and so we've gradually brought that in, but the noise was the initial problem.

TA3: There was one little boy who liked to be restrained, we worked that out, he loved it, and in the end we had a heavy medicine ball, and when he got a bit jumpy we used to roll on it, lean on it and roll it over him, and then we would do that about six times, and we thought if anyone came they would think "oh what are they doing?", and then he'd say, "okay I'm ready to write now", and off he'd go! And you'd see, you see him bouncing on space hoppers!
Subtheme 1.5(d) We use visuals
TA6: …so I think they really do work because it's something that they have, like a security blanket…
TA1: It was a key-ring for the children so they had, erm, they had almost little flashcards of what was going to happen each day.
TA1: you can put that on there and that will prompt them to go oh, what's that, and you can explain it, and they're ready for it then in the morning, or whenever it is, and so it's sort of using these resources to pre-empt, throughout the day, anything that might cause…
TA6: …and then we had, I did a diary for a little, and he literally, he opened the book and… and he had a little packet with all little things in that he stuck on every morning- so far we went as far as break and he went and did the rest, and then we went and did the last bit of it - but he was ticking each of them off when he had done the lesson which was good
TA4: We use comic strips - those work pretty well for sorting out issues
TA1: We had a work station, so, which was something the child had, a colour of something they wanted, with a picture of something they wanted, timetable on, and like a whiteboard they could write anything on, and that was on their desk in the classroom,
Subtheme 1.5(e) We make it concrete
TA6: we've been doing The Piano, but there's a bit in the middle of The Piano about this man and how he feels and the war and everything and I sat there, and there's a beautiful picture of houses all knocked down that have been bombed, and I said " What's in that picture?' "Houses" and I said "What do you think's happened? Any noises you might hear?" and I looked at the teacher and I said "I can't do this" Because it's not in the real world…. I'd actually like to get a laptop to show him pictures … just to show him, and listen to, and in fact turn the picture off and just let him hear the noises
Overarching theme 2: We're an extra pair of hands
Theme 2.1: We are indispensable
TA4: …from bringing them in to school, even getting them in though the front door
TA3: They're so busy (teachers), they've got so much to do now that actually you're almost better to say, I've got them, look. I've got them and I'll take them and do this and this and this with them

TA6: But also, there's so much going on and there aren't enough people to say, "okay well we'll have to leave that", you know, someone else is going to have to …
TA5: They need to learn to listen to the other adults
TA2: It's always "when are you available? Who's going to cover the child?"
TA5: …Trying to sort out a lot, not just with the children we work with.
Theme 2.2: We support access to the curriculum
TA1: To support the children as they learn. Also to support the teachers, whether that is by supporting the children, or quite often it's that we do the busy work, generally keeping the class ticking along.
TA2: You're the, the extra hours that the teachers don't have.
TA3: trying to help the children access all that they can…. gives you a chance to put things in place for them so that they can actually take part and access the curriculum because that is very difficult.
TA4: I found it very surprising how little the teachers seem to be aware of how to deal with children with ASD
Theme 2.3: We support many children in the class
TA5: because, you kind of use your skills and what you know to try and do it
TA5: You do notice, and I think you are more attuned to see other children's little quirks……TA2: You are. I find it hard to focus on one child actually in the classroom, because you're right, there are always 2 or 3 others you keep your eye on because you know they need you……...R: Yes…….?: Mmmm…….TA2: and particularly when you find from an ability point of view those children might well be on the same table doing something in the afternoon, inevitably, you're sharing your attention 4 or 5 ways……...?: Yes…….TA2: ummm and I think sometimes the teacher will rely on that a little bit because they know that that's happening
Theme 2.4: We keep everything calm
TA5: she (the teacher) doesn't have time, when they've come in from a break and she's got to get on and teach her lesson, and someone's hiding under the table and screaming and crying, because something's just happened out in the playground.
TA5: You're mediators between the children as well.
TA5: she (the teacher) doesn't have time , when they've come in from a break and she's got to get on and teach her lesson, and someone's hiding under the table and screaming and crying, because something's just happened out in the playground
TA2: Just to bring it back on track, will often be an achievement.
TA1: Yes bring it down, bring it back on track so that she felt comfortable.
Theme 2.5: We monitor and record

TA5: I ... have another form that I just do quickly, against his targets and against his IEP as well, to see how he's going, in the morning and the afternoon as well and we've got a highlighting system so we just use green if he's exceeded it, yellow if he's on task and pink if he's not so I literally just quickly whizz through that and any other additional comments about what's happened the day.
TA5: at the end of the month I put it altogether in a file and collate all of that and then hand it over to the SENCo
TA6: I go and see the SENCO regularly and tell her what's gone on … and the teacher obviously, I keep him in the know about what's going on.
TA2: Actually tiny little things that you think are insignificant you read a few weeks later and you think - there's a pattern emerging there and I hadn't appreciated that as being such a useful tool
Overarching theme 3: Supporting other adults
Theme 3.1: We communicate with parents
TA3: I also have a worry book which goes, she has, which comes in and then I write in it, say how her day's gone, and it goes home and I hope that something else comes back
TA6: Yes she (mum) and I went on the course (EarlyBird Plus) and she was very much up for what else can we do? What can I do? Is there anything more I can do to help him?
TA2: I've had a lot to do with parents so far actually which again has been a bit of a surprise to me - I didn't realise how much it would involve….it's a challenge I think, because you know what needs to be communicated, what you want to say, what needs to be said, and I think that it also depends what they want to hear you know?
TA2: …and my little girl is taxied in every day…So it's really hard to get that …I mean just a minute or two would be incredibly useful but we just don't so…that's part of the problem as well
TA7: It's all so important isn't it, because you want to know what sort of night they had, and what they had for breakfast the morning, what they were like coming to school, that kind of thing and then you know what's ahead…
Theme 3.2: We develop relationships with staff
Subtheme 3.3(a) Teacher doesn't always know best
TA6: They, not necessarily raise their voice, but they use this voice which then sets the child up here and then they get cross because the child's up here and they say something and it just escalates and escalates.
TA4: I found it very surprising how little the teachers seem to be aware of how to deal with children with ASD.
TA8: The teacher training programme doesn't really allocate a lot of time to SEN specific, they generally don't do much SEN training do they, during the PGCE training?

TA6: But on the other hand, you're doing whats best for the child and you think, well actually, teacher's not - and that sounds awful, but the teacher's not ….
TA6: ….and so he got, he got sort of the best of both, but, you know that's the task of..the teacher just said to me you know I completely forgot to say I just … yeah that's fine, I mean he stayed in the lesson, he just sat under the table watching
TA1: You have to make sure you communicate with the teacher,
TA5: There are instances I've had where he's done something out in the playground for example, and when I've unpicked it all, it's actually a misunderstanding from the other adult's point of view actually
TA6: so that's what they say, the way they talk, and then they, not necessarily raise their voice, but they use this voice which then sets the child up here and then they get cross because the child's up here and they say something and it just escalates and escalates…..?: Yes……..
TA2: There's a communication …a little bit of knowledge can go a long way.
TA6: And if not, then, then they could come back to you, but it also gives other people access so they can learn from it as well.
TA4: I think the PPA time can be a nightmare…well PPA time is a nightmare anyway with three different lessons in the afternoon, but to suddenly have another person standing there is, to them, it's the most frightening thing ever
Subtheme 3.3(b) Helping other adults to understand
TA5: We always used to have at least one or two out on the playground ……...TA6: And if not, then, then they could come back to you, but it also gives other people access so they can learn from it as well.
TA6: Sometimes we, we talk a lot with the teacher, not necessarily with the whole year group , we talk with our teacher and I say to him, "actually that's not going to work" and he says "why?" and I say "because it's going to set her off"
TA6: And so I used to say to the teacher, "Can we try not to put time limits otherwise she's never going to get any lunch" you know, and she…
TA6: as a teacher she was a brilliant teacher, but actually had not come into contact very much with children like him so she sort of fell into every possible hole she could fall into,
TA5: and also that is the same school-wise as well, because there are an awful lot of other teachers and, TAs out in the playground, that may not be aware of this child. Say something's happened recently and they didn't know maybe how to react to a child, and if say something had been written and everyone was aware of it, then this would never have happened.
TA5: there are instances I've had where he's done something out in the playground for example, and when I've unpicked it all, it's actually a misunderstanding from the other adult's point of view actually

TA2: …a little bit of knowledge can go a long way
Overarching theme 4: How do we manage the role?
Theme 4.1: We have particular personal skills
Subtheme 4.1(a) We are flexible
TA6: Thinking outside the box TA2: Yes being flexible…
TA6: you should see her face when she picked up one of these cards and she read it – and went "I'm not doing that " and put it away so I thought okay…I had a sneak at the card and I thought oh, we'll go down that path some other time.
TA2: You never end up in the direction you're supposed to be going in – that's as good as it can be for that afternoon.
Subtheme 4.1(b) We are patient
Subtheme 4.1(c) We listen
TA5: I think being a good listener too….Yes
TA5: yes you just have to take them out and try and listen
Theme 4.2: We pick it up as we go along using a trial and error approach
TA4: It's a bit of everything really. I went to xx (specialist ASD school) about two years ago, on a sensory course which was really really helpful actually, and you can spot all the things that they've spoken about. I bought the book that they recommended so now we can have a look at that book and see what might work…….TA3: match across…….TA4: what might work, and it if doesn't work you can just move on to the next thing.
TA1: I found what was most difficult is when they have done something wrong, like when they're being naughty or something, how far do you go with the discipline?
TA1: It would normally be differentiated but sometimes when you get to the lesson of course you realise actually that what's been planned isn't going to work so you have to done it on the (…).
TA3: A lot of it is actually watching them……TA2: Observing ….. ?: Yes …… ?: Observing them …….. TA6: Watching them so, not just actually working with them but watching them so that you are seeing what they are doing……TA3: Yes.
TA2: I come in early so that I get a bit of planning time - it's the only way to make sense of a job-share.
TA2: Just being one step ahead if you can. Watching for triggers that like…TA1: Anything that could distract from whatever the problem was……TA5: Yes……..TA2: Absolutely!…..TA2: It's a lot about distraction actually, the whole day!
TA1: I'd get her out of whatever mood she was in to - she'd come out from under the desk and we could get on with, we could do reading or something else, perhaps related to what she'd done earlier in the day without any problems.

TA2: And all of a sudden you've got to find a solution…..TA1: Exactly, its aaaargh! And more often than not you figure it out because it's ……TA2: Yes…….TA1: it's just a case of finding what will distract them. Whether it's something to solve the problem, or… you don't ignore the problem, but you side-step the problem. I think it's just any, any victory! Laughs.
TA1: Anything that could distract from whatever the problem was TA5: Yes TA2: Absolutely! TA2: It's a lot about distraction actually the whole day!
M: And so liaison time and planning time is a big one isn't it? Does anyone have any of that? Laughter. TA3: No TA1: No TA5: No
TA1: I suppose everything, everything essentially that we know about these children has been picked up by observing them and working with them,
TA1: It would normally be differentiated but sometimes when you get to the lesson of course you realise actually that what's been planned isn't going to work so you have to do it on the hoof. TA2: And all of a sudden you've got a to find a solution TA1: Exactly, its aaaargh! And more often than not you figure it out because it's …… TA2: Yes
TA1: It was being able to identify things that made her feel comfortable, and use those to sort of, I suppose, mange her moods and manage the situation in the classroom.
TA5: We bounce a lot of ideas off each other.
TA4: I had three books given to me by the SENCo here to read over the summer in preparation for J.
TA1: A teaching assistant would sit with the children and do whatever, any tasks, so I was put in class to, I suppose familiarise each other.
TA1: So it's just having that time to get to know each other, TA6: Start building a relationship TA1: To build a relationship ummmm TA6: And I think talking to other people who have done it
TA6: And there was nobody else had done it - all that we did was based…we did have some training, not …but always very much based on trial and error-that sounds awful
TA4: I need a lot more support and training that probably I did have.
TA2: We haven't had any reading or training or anything so it was being thrown in the deep end actually.
Theme 4.3: There are some training opportunities
Subtheme 4.3(a) We get advice from outside agencies
TA3: years ago I was trained by the educational psychologist to use Circle of Friends so I often use bits of that.

TA3: I had one boy that was extremely hard and I had him for 4 years and by the end of it I was pulling my hair out, and I'd tried absolutely everything, and it was (outreach teacher) that came in and I went…I'd had enough. He needs to know this, this, this, this and this. And she said " Well tell him!"
TA6: and you can sit and problem-solve from a different point of view - because you don't necessarily know what's going on.
TA3: It's hard to be objective isn't it - you need an extra pair of eyes.
Subtheme 4.3(b) We watch others' practice
TA6: It's really good when you watch someone else doing it.
Subtheme 4.3(c) We have training
TA4: It's a bit of everything really. I went to XX (specialist ASD school) about two years ago, on a sensory course which was really, really helpful actually and you can spot all the things that they've spoken about. I bought the book that they recommended so now we can have a look at that book and see what might work.
TA3: Well years ago I was trained by the educational psychologist to use Circle of Friends so I often use bits of that.
TA6: We were on a course and we were made to write a social story for the other person who was with us
TA5: I've been lucky enough to go on the trainings that I've wanted to go on, but I know we've got lots in our school, and of course budgets and stuff but when I have been on a course they've been very beneficial
Theme 4.4: Don't let it get you down
TA2: We weren't really being fully honest in how the job was making us feel, and I remember really clearly that we both reached a sort of crisis point with it, and we had about an hour and a half at home on the phone because there was no other time to talk during the day, and it felt so much better at the end of that hour and a half to just explain what was happening what had been troubling us, and tell each other, and we felt so much better about it and since then it just feels like much more of a partnership, and we just have to grab those five minutes for handover whenever we can but it definitely gave us some good ideas.
TA1: I get on very well with the class teacher anyway, and with that teacher again this year, but if we'd each reached sort of breaking point, even if it was in the middle of a lesson, we would be able to pick up on it and we would quite happily be able to look at each other and say oh take five minutes
TA2: And actually I found out that she was having a much harder time with it than I was, you're trying to do a good job, you want to be doing a good job and be seen to be, want to be successful, and also it's hard to think, when you're new in the job, how much of it is me not appreciating what I need to be doing, and how much of it is just a bad day for her.

TA6: and it was afterwards when he, when I got him to calm down, and I was obviously feeling at that point you know, really, like this, and then when he calmed down I thought thank goodness, but you don't calm down the same….. they used to come along and you think 'just don't', and they would say "oh what are you doing out in the corridor" , and he's off again, and I'm just standing there thinking…I It was the person that came along that I really wanted to shout at, I really wanted to tell them, "Go away, leave me alone!"
TA2: Initially I think they were just going to have a single person for the entire week, and I now know three months into the job how that is the most terrible idea.
TA6: I don't know how common it is, because actually they do become totally attached to you, and so you need to have a break.
TA2: …the afternoon does allow us a little bit more breathing space
TA8: You probably thought, at that point at your lowest point, that you were the only one that was going through that, and questioned your own skill set, when really it was more like a natural process.
TA8: It can be very demoralising when you're working with a child on your own all the time, particularly when a child's going through a period of increased anxiety, you know and it's nice to have someone else to bat ideas off.
TA6: he's off again, and I'm just standing there thinking…It was the person that came along that I really wanted to shout at, I really wanted to tell them, "go away, leave me alone!"
TA1: Don't dwell on what's happened the day before
TA2: Don't take it too personally …….TA5: They don't mean it - it's just how they're feeling at the time
TA3: You need a break sometimes……...TA5: You need a break……...TA1: Yes……TA6: But also, there's so much going on and there aren't enough people to say ok well we'll have to leave that, you know, someone else is going to have to …….
TA1: quite often, we used to work like a tag team - there would be points where you got so exasperated and frustrated…..laughter……TA1: Right I'm out and you're in! ……and I think, your amount of time you need before you get exasperated is a lot longer that it would be for the teacher who sits there for five minutes.

Appendix O: Item development for the TASCA

Source	Item	TASCA item
ASSET	Conduct an assessment of this student's developmental skills/learning skills?	Clearly describe the pupil's learning skills and needs?
Focus group		Describe how autism affects the pupil's emotional skills and needs?
ASSET	Assess this student's social interaction skills	Describe how autism affects the pupil's social and friendship skills
ASSET	Generate teaching activities for this student	Modify tasks so that the pupil can carry them out effectively
ASSET	Write a measurable objective for this student	Contribute effectively to target setting with parents and professionals
ASSET	Use visual structure to increase this student's independence	Use visual approaches to help the pupil work independently
ASSET	Help this student to understand others	Help the pupil to understand others better
ASSET	Help this student be understood by others	Help the pupil to be understood by others
ASSET	Provide opportunities for communication I the classroom throughout the day for this student	Work on communication targets across the curriculum/ through the school day
ASSET	Assess the causes of problematic behaviours of this student	Assess why the pupil might not behave appropriately within a class or group
	Write a teaching plan for this student based on goals and objectives	Implement a specific programme with the pupil to develop their skills?
ASSET	Collect data to monitor this student's progress towards objectives	Collect data to monitor progress towards an outcome or target

ASSET	Assess this student's social interaction skills	Work on a programme to improve the pupil's social skills under teacher direction
ASSET	Describe parental concerns regarding this student	Describe parent's views about the pupil' progress/ strengths and skills
ASSET	Communicate and work effectively with this student's parent(s) or caregiver	Communicate effectively with the parent or carer of the pupil
ASSET	Help this student remain engaged	Help the pupil to stay on task?
Focus group		Clearly describe how the sensory environment affects the pupil
Focus group		Ensure that sensory issues are managed well each day
ASSET	Teach this student social interaction	Help this pupil to make friends?
Focus group		Help this pupil to deal with feelings of unfairness
Focus group		Pre-empt situations that the pupil will find challenging
EEF (in class)		Use strategies so that the pupil learns independently of the adult
EEF (out of class)	Collect data to monitor this student's progress towards objectives	Carry out some assessment of the pupil's progress against targets
EEF (out of class)		Link what is learned in one session to other lessons and experiences?
EEF		Provide feedback to the pupil which relates to their success criteria? After expert panel: Provide feedback that links to the success criteria for the pupil
EEF		Use a range of different ways to prompt the pupil?

EEF		Modify my own language to support the pupil?
EEF		Connect the task to the pupil's particular interests and goals? After expert panel: Connect the task to the pupil's own interests and goals?
EEF		Talk with the pupil about how we think After expert panel: Talk with the pupil about different ways of working out how to tackle a problem
Focus group		Explain to somebody about autism?
ASSET Dimopoulou	Motivate this student I can motivate students with autism to persevere	To what extent can you consult with others to know what is motivating for this pupil?
Dimopolou	I can adjust my lesson plans to meet the needs of students with autism without singling them out	Break down a skill into its component parts for the pupil?
Focus group		Ensure that the child is aware of changes in the timetable and is not distressed by these? After expert panel: Ensure that any changes are made clear to the pupil in the way that suits them best
Focus group		Calm a pupil who is upset or angry?
Focus group		Ask for help from others to develop your practice
Focus group		Ask for emotional support for yourself

ASSET: Ruble et al. (2013).
EEF: Sharples et al. (2015).
Dimpolou (2012)

Appendix P: Expert panel task prompts for content validation

The expert panel will complete the following:

(a) The items (as a whole) are representative of the construct?

Strongly disagree Disagree No opinion or uncertain Agree Strongly agree

(b) The items are clearly worded?

Strongly disagree Disagree No opinion or uncertain Agree Strongly agree

The following items were felt to be unclear:

……
……
……

(c) Each item is relevant to the identified aspects of the construct?

Strongly disagree Disagree No opinion or uncertain Agree Strongly agree

(d) Do you feel that any key indicators have been omitted?

……
……

(d) The questionnaire is easy to complete.

Strongly disagree Disagree No opinion or uncertain Agree Strongly agree

(e) How long did the questionnaire take to complete?

……minutes

Thank you.

Appendix Q: Feedback from expert panel task prompts for content validation

(a) The items (as a whole) are representative of the construct of SE? Ie,they represent the tasks that TAs supporting children with ASD would be expected to carry out.

Strongly disagree Disagree No opinion or uncertain Agree **Strongly agree**

(b) The items are clearly worded?

Strongly disagree Disagree No opinion or uncertain Agree **Strongly agree**

The following items were felt to be unclear:

- *Q28. Provide feedback to the pupil that links to <u>their own</u> success criteria – do you mean feedback 'that links to the success criteria for the pupil' (rather than the pupils **own** criteria)?*
- *Q48. Are the demands of your role clear? - by 'demands of your role' do you mean 'the 'responsibilities' or 'the expectations'? or could you mean the physical and emotional demands of the role?*
- *Q32. Talk with the pupil about different ways of thinking – do you mean that people have different perspectives? Or do you mean problem solving, creative thinking, step by step etc?*
- *Q8. Tailor activities to help the pupil carry out a task well – do you mean 'to help the pupil understand a task' or do you mean 'to motivate them to complete the activity' e.g. stick a Bob the Builder says…" picture on to the worksheet?*

(c) Each item is relevant to the identified aspects of the construct of SE?

Strongly disagree Disagree No opinion or uncertain Agree **Strongly agree**

(d) Do you feel that any key indicators have been omitted?

- *Perhaps something like ……"Can you explain an activity to help a pupil understand what it is that they need to do?" – this is different to just breaking an activity down step by step or presenting info visually – its about recognising that pupils with ASD might misunderstand what is said e.g. "tick the right box", or might not know that Sally has moved the ball!*

- *Supporting the development of life skills is the only other area that I can think of that might be missing.*

(d) The questionnaire is easy to complete.

Strongly disagree Disagree No opinion or uncertain Agree **Strongly agree**

(e) How long did the questionnaire take to complete?

- 10 – 15 minutes (but I was reflecting as I went along!)
- 8 minutes
- About 10 minutes

Do you have any additional comments?

A few typos:
Numbering of questions is out of sync at the start – Q1, Q2, Q6
Q18 has "Click to write choice 1" next to it, rather than "Click to drag"
Q14 typo on spacing – "behave appropriately"
Q31 typo – missing '?'

Calibration of 'click to drag' is out by about 2% - this might make no difference at all but, may be, it could skew the results?

I am very interested - This could give me the answers I need!

Appendix R: Teaching Assistants Supporting Children with ASD (TASCA) questionnaire

The purpose of this survey is to look at how capable Teaching Assistants feel in supporting children with Autism Spectrum Disorders (ASD) in mainstream infant, primary and junior schools.

It will take approximately 10 minutes to complete.

Benefits

It is hoped that through your participation, we will find out what helps TAs to feel confident in carrying out this important role in schools.

Confidentiality

As all questionnaire responses will be submitted online via Qualtrics online survey programme, anonymity is guaranteed and responses will remain confidential. All data collected in this survey will be held securely by the survey software provider under contract in accordance with the Data Protection Act (1998) and will be destroyed one year after completion.

Participation

Participation in this research study is completely voluntary, with the right to withdraw or refuse to participate entirely at any time.

Questions about the Research

If you have questions regarding this study, you can contact Louise Lombardi, Researcher or Dr Kyla Honey, Supervisor.

This study was reviewed and approved by:

School of Psychology Research Ethics Committee, Cardiff University

Tower Building

Park Place,

Cardiff.

CF10 3AT

Telephone: +44 (0) 29 2087 0360

psychethics@cardiff.ac.uk

By checking the Yes button below I agree to the above terms of consent, and am willing to participate in this study.

If you do not agree to participate please select "no" to be taken to the end of the survey.

Yes

No

If Yes Is Selected, Then Skip To Scale for Teaching Assistants Support...Options

If No Is Selected, Then Skip To End of Survey Options

Scale for Teaching Assistants Supporting Children with Autism (TASCA)

This questionnaire is designed to help us to gain a better understanding of the kinds of things that create difficulties for Teaching Assistants who support children with autism (ASD). Please rate how certain you are that you can do the things discussed with regard to the child with autism.

Rate your confidence on the scale from 0-100 using the sliding scale

0 - I cannot do at all 100 - I am certain I can do

Q1

clearly describe the pupil's learning skills and needs?

0 10 20 30 40 50 60 70 80 90 100

Click to drag

Q2

describe how autism affects the pupil's emotional skills and needs?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q3

describe how autism affects the pupil's social and friendship skills?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q4

modify tasks so that the pupil can carry them out effectively?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q5

contribute effectively to target setting with parents and professionals?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q6

use visual approaches to help the pupil to work independently?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q7

help the pupil to understand others better?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q8

help the pupil to be understood by others?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q9

work on communication targets across the curriculum/through the school day?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q10

assess why the pupil might not behave appropriately within a class or group?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q11

implement a specific programme designed by the teacher to develop learning skills?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q12

collect data to monitor progress towards a target?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q13

implement a social skills programme designed by the teacher?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q14

describe parent/carers' views about the pupil's progress/ strengths and skills?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q15

help the pupil to stay on task?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q16

clearly describe how the sensory environment affects the pupil?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q17

ensure that sensory needs are managed effectively at school?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q18

help this pupil to make friends?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q19

help this pupil to deal with feelings of unfairness?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q20

pre-empt situations that the pupil will find challenging?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q21

use strategies so that the pupil learns independently of the adult?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q22

carry out some assessments of the pupil's progress against targets?

0 10 20 30 40 50 60 70 80 90 100

Click to drag

Q23

link what is learned in one lesson to other lessons and experiences?

0 10 20 30 40 50 60 70 80 90 100

Click to drag

Q24

provide feedback that links to the success criteria for the pupil?

0 10 20 30 40 50 60 70 80 90 100

Click to drag

Q25

use a range of different ways to prompt the pupil?

0 10 20 30 40 50 60 70 80 90 100

Click to drag

Q26

modify my own language to support the pupil?

0 10 20 30 40 50 60 70 80 90 100

Click to drag

Q27

connect the task to the pupil's own interests and goals?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q28

talk with the pupil about different ways of working out how to tackle a problem?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q29

explain to others about autism?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q30

know what is motivating for this pupil?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q31

break a skill down into its component parts for the pupil?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q32

ensure that any changes are made clear to the pupil in the way that suits them best?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q33

calm a pupil who is upset or angry?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q34

ask for help from others to develop your practice?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q35

ask for emotional support for yourself?

010 20 30 40 50 60 70 80 90 100

Click to drag

Q36

tell someone how they could develop their knowledge and skills in supporting pupils with ASD?

010 20 30 40 50 60 70 80 90 100

Click to drag

Thank you for completing the scale! Please take a moment to fill in some background information about yourself.

Please select your age-range

- 21-30
- 31-40
- 41-50
- 51-60
- 61+

Please select your gender

- female
- male

What is your highest level of education?

How many years experience do you have as a TA?

Does the child you support have a statement of Special Educational Needs or an Education, Care and Health Plan?

- Yes
- No

Don't know

Have you attended ASD specific training? Please detail.

Are the expectations of the TA role clear?

Yes

No

Would you be willing to take part in a short interview with the researcher at a time and place to suit yourself?

Yes

No

Display This Question:

If Would you be willing to take part in a short interview with the researcher at a time and place to... Yes Is Selected

Many thanks. Please complete contact details so that I can contact you.

Name

Email address

Telephone number

Click here to edit form fields

Q51

Thank you for your time in completing this survey!

Debrief statement.

Study Title: Exploring Teacher Assistant self-efficacy in relation to supporting children with ASD

Thank you very much for your participation in this study.

The intention behind the proposed study was to explore how capable Teaching Assistants (TAs) felt in supporting children with Autism Spectrum Disorder (ASD).

Teaching Assistants contributed to a focus group to develop items for a SE questionnaire. This questionnaire was then piloted and more widely distributed via an online link to gain an idea about how capable Teaching Assistants felt in supporting children with ASD.

Anonymity in completing the online questionnaire has been achieved via the Qualtrics survey software.

The data in this study is held confidentially by Cardiff University. You have the right to withdraw your data without explanation and retrospectively up until (Date).

Many thanks for your participation in this project. The information gained from the questionnaire will help to identify those aspects of the role in which TAs believe that they are more capable and less capable, and will contribute to a review of the training and support offered to TAs within the county. In addition, it will be shared with key education staff including Educational Psychologists and Specialist Teachers to support their knowledge and understanding. At no point will it be possible for individual responses to be traced to individuals.

If you have any questions, or would like to know more about this research, then please contact the researcher or supervisor as below:

Louise Lombardi, Area Senior Educational Psychologist (contact details).

Supervised by Dr Kyla Honey, School of Psychology, Cardiff University, Tower Building, 70 Park Place, Cardiff. CF10 3AT. Tel: 029 2087 0360. HoneyK1@cardiff.ac.uk

If you have any complaints you can contact the Secretary of the Ethics Committee, School of Psychology, Cardiff University, Tower Building, Park Place, Cardiff. CF10 3AT. Tel: 029 2087 0360.

Appendix S: Gatekeeper letter to Head Teachers, Phase 2

Address

Date

Dear (Head Teacher name),

I am carrying out research in relation to my professional Doctorate in Educational Psychology, at the School of Psychology, Cardiff University. I am aiming to explore Teaching Assistant SE in relation to supporting children with Autism Spectrum Disorder (ASD) in mainstream primary schools.

Teaching Assistants who are experienced in working with children with ASD have taken part in a focus group to enable me to modify items for a SE questionnaire. The completed questionnaire is now ready to be more widely distributed to gain an idea about how capable teaching assistants feel in supporting children with ASD. I am writing to all head teachers within the (area) quadrant to enquire whether you would be willing to allow TAs in your school working with children with ASD to be invited to complete this online questionnaire, which will take approximately 10 minutes? I have attached an information sheet for TAs.

Please consider and check the following:

(i) No, I don't have any TAs supporting children with ASD in my school.

CHECK BOX

(ii) Yes, I do have TAs supporting children with ASD and will pass on your information sheet to them so that they can decide whether or not to take part in your study. CHECK BOX

If you have checked this box, please hand the information sheet to any TAs who support children with ASD.

(iii) No I am not happy for my TAs to be contacted in regard to your study and will not pass on the information sheet.

CHECK BOX

Many thanks in advance for your consideration of this project. I will contact you again within a week or two, to check that this letter was received and to

be available to answer any questions you may have. In the meantime, please let me know if you require further information.
With regards,

Louise Lombardi

Supervised by Dr Kyla Honey, School of Psychology, Cardiff University. Tower Building. 70, Park Place, Cardiff, CF10 3AT. 02920870360

If you have any complaints please contact: The Secretary of the Ethics Committee, School of Psychology, Cardiff University, Tower Building, Park Place, Cardiff CF10 3AT. Tel: 029 2087 0360.

Appendix T: Information sheet for Teaching Assistants who might be interested in completing the online questionnaire.

Calling all TAs who support children with Autism Spectrum Disorder!

An opportunity to take part in an exciting research project.

My name is Louise Lombardi, and I am an Area Senior Educational Psychologist in XXX.
I am carrying out research in relation to my professional Doctorate in Educational Psychology, at the School of Psychology, Cardiff University.

Teaching Assistants (TAs) who are experienced in working with children with Autism Spectrum Disorder (ASD) have taken part in a focus group to help to devise an online questionnaire for TAs. This online questionnaire is now ready for completion and will help us to gain an idea about how capable TAs feel in supporting children with ASD. The knowledge gained from this confidential questionnaire will help us to work out how best to support TAs who are working in this role.

If you are a TA who supports children with ASD, then I would like to invite you to complete this online questionnaire, which will take approximately 10 minutes.

Your questionnaire responses will be submitted online via Qualtrics, and personal details will not be sought, unless you agree to provide them for future opportunities to take part in the study. Anonymity is guaranteed and responses will remain confidential. Data will be destroyed after completion of the project.

To access the questionnaire, please follow this link, or type the following into the search box:

www./(Qualtrics survey link)

Supervised by Dr Kyla Honey, School of Psychology, Cardiff University. Tower Building. 70, Park Place, Cardiff, CF10 3AT. 02920870360

If you have any complaints please contact:
The Secretary of the Ethics Committee, School of Psychology, Cardiff University, Tower Building, Park Place, Cardiff CF10 3AT. Tel: 029 2087 0360.

Appendix U: Follow-up email to head teachers

Dear Headteacher,

You might recall that I wrote to you a week or so ago to enquire whether you would be willing to allow TAs in your school working with children with ASD to be invited to complete an online questionnaire. This examines how capable they feel in supporting children with ASD. Please consider the options below. If you are able to select the “Yes” option, but not had the opportunity to proceed, could you please cut and paste the attached information to the TAs you have identified so that they can decide whether to take part in the study?

(i) No, I don't have any TAs supporting children with ASD in my school.

(ii) Yes, I do have TAs supporting children with ASD and will pass on your information sheet to them so that they can decide whether or not to take part in your study.

(iii) No I am not happy for my TAs to be contacted in regard to your study.

Many thanks,
Louise Lombardi

Please cut and paste:

Calling all TAs who support children with Autism Spectrum Disorder!

An opportunity to take part in an exciting research project.

My name is Louise Lombardi, and I am an Area Senior Educational Psychologist in XXX.

I am carrying out research in relation to my professional Doctorate in Educational Psychology, at the School of Psychology, Cardiff University.

Teaching Assistants who are experienced in working with children with ASD have taken part in a focus group to help to devise an online questionnaire. This questionnaire is now ready to be completed. Your responses to this questionnaire will help us to gain an idea of how capable teaching assistants feel in supporting children with ASD. It is hoped that the responses gained will help us to support TA practice in working with pupils with ASD.

If you are a TA who supports children with ASD, I would like to invite you to complete this online questionnaire which will take approximately 10 minutes.

Please click on the hyperlink below:
www.(Qualtrics online survey link)

Supervised by Dr Kyla Honey, School of Psychology, Cardiff University. Tower Building. 70, Park Place, Cardiff, CF10 3AT. 02920870360

If you have any complaints please contact:
The Secretary of the Ethics Committee, School of Psychology, Cardiff University, Tower Building, Park Place, Cardiff CF10 3AT. Tel: 029 2087 0360.

Appendix V: Minimum, maximum and variance of TASCA items

TASCA Item	Min	Max	Mean	SD	Variance	Count
1. clearly describe the pupil's learning skills and needs?	20.00	100.00	77.88	18.04	325.47	50
2. describe how autism affects the pupil's emotional skills and needs?	31.00	100.00	80.34	17.37	301.54	50
3. describe how autism affects the pupil's social and friendship skills?	8.00	100.00	82.80	19.22	369.55	49
4. modify tasks so that the pupil can carry them out effectively?	20.00	100.00	80.20	17.12	293.14	49
5. contribute effectively to target setting with parents and professionals?	0.00	100.00	68.41	24.95	622.49	49
6. use visual approaches to help the pupil to work independently?	12.00	100.00	81.22	19.12	365.53	50
7. help the pupil to understand others better?	26.00	100.00	72.38	18.80	353.61	48
8. help the pupil to be understood by others?	40.00	100.00	77.00	16.21	262.64	50
9. work on communication targets across the curriculum/through the school day?	19.00	100.00	73.20	19.33	373.52	50
10. assess why the pupil might not behave appropriately within a class or group?	21.00	100.00	76.24	19.00	360.94	50
11. implement a specific programme designed by	28.00	100.00	81.24	19.66	386.67	49

the teacher to develop learning skills?						
12. collect data to monitor progress towards a target?	17.00	100.00	77.36	23.57	555.47	50
13. implement a social skills programme designed by the teacher?	0.00	100.00	75.92	23.60	557.10	49
15. help the pupil to stay on task?	15.00	100.00	78.90	20.76	431.09	50
16. clearly describe how the sensory environment affects the pupil?	2.00	100.00	76.31	23.78	565.64	49
17. ensure that sensory needs are managed effectively at school?	6.00	100.00	69.88	24.36	593.50	49
18. help this pupil to make friends?	10.00	100.00	70.02	20.08	403.18	50
19. help this pupil to deal with feelings of unfairness?	4.00	100.00	67.94	28.43	808.18	50
20. pre-empt situations that the pupil will find challenging?	25.00	100.00	82.68	17.32	300.02	50
21. use strategies so that the pupil learns independently of the adult?	0.00	100.00	71.63	25.61	655.70	49
22. carry out some assessments of the pupil's progress against targets?	26.00	100.00	76.84	19.80	391.97	49
23. link what is learned in one lesson to other lessons and experiences?	40.00	100.00	78.34	17.21	296.10	50
24. provide feedback that links to the success criteria for the pupil?	17.00	100.00	80.88	18.01	324.47	50
25. use a range of different ways to prompt the pupil?	20.00	100.00	83.08	18.19	330.71	50
	29.00	100.00	88.98	13.67	186.78	50

26. modify my own language to support the pupil?						
27. connect the task to the pupil's own interests and goals?	30.00	100.00	81.94	18.76	352.02	50
28. talk with the pupil about different ways of working out how to tackle a problem?	0.00	100.00	77.86	26.45	699.36	50
29. explain to others about autism?	8.00	100.00	77.72	24.53	601.92	50
30. know what is motivating for this pupil?	11.00	100.00	82.30	21.01	441.41	50
31. break a skill down into its component parts for the pupil?	16.00	100.00	78.46	21.29	453.45	50
32. ensure that any changes are made clear to the pupil in the way that suits them best?	26.00	100.00	81.90	18.53	343.29	50
33. calm a pupil who is upset or angry?	22.00	100.00	85.34	17.45	304.38	50
34. ask for help from others to develop your practice?	34.00	100.00	86.12	17.03	289.87	50
35. ask for emotional support for yourself?	0.00	100.00	57.60	28.99	840.60	50
36. tell someone how they could develop their knowledge and skills in supporting pupils with ASD?	2.00	100.00	64.30	29.41	865.01	50

Min. = minimum
Max. = maximum

Appendix W: TASCA data – standardised z scores

14. describe parent/carers' views about the pupil's progress/ strengths and skills?	1.00	100.00	69.44	24.66	608.25	50
15. help the pupil to stay on task?	15.00	100.00	78.90	20.76	431.09	50
16. clearly describe how the sensory environment affects the pupil?	2.00	100.00	76.31	23.78	565.64	49
17. ensure that sensory needs are managed effectively at school?	6.00	100.00	69.88	24.36	593.50	49
18. help this pupil to make friends?	10.00	100.00	70.02	20.08	403.18	50
19. help this pupil to deal with feelings of unfairness?	4.00	100.00	67.94	28.43	808.18	50
20. pre-empt situations that the pupil will find challenging?	25.00	100.00	82.68	17.32	300.02	50
21. use strategies so that the pupil learns independently of the adult?	0.00	100.00	71.63	25.61	655.70	49
22. carry out some assessments of the pupil's progress against targets?	26.00	100.00	76.84	19.80	391.97	49
23. link what is learned in one lesson to other lessons and experiences?	40.00	100.00	78.34	17.21	296.10	50
24. provide feedback that links to the success criteria for the pupil?	17.00	100.00	80.88	18.01	324.47	50
25. use a range of different ways to prompt the pupil?	20.00	100.00	83.08	18.19	330.71	50
26. modify my own language to support the pupil?	29.00	100.00	88.98	13.67	186.78	50
	30.00	100.00	81.94	18.76	352.02	50

27. connect the task to the pupil's own interests and goals?						
28. talk with the pupil about different ways of working out how to tackle a problem?	0.00	100.00	77.86	26.45	699.36	50
29. explain to others about autism?	8.00	100.00	77.72	24.53	601.92	50
30. know what is motivating for this pupil?	11.00	100.00	82.30	21.01	441.41	50
31. break a skill down into its component parts for the pupil?	16.00	100.00	78.46	21.29	453.45	50
32. ensure that any changes are made clear to the pupil in the way that suits them best?	26.00	100.00	81.90	18.53	343.29	50
33. calm a pupil who is upset or angry?	22.00	100.00	85.34	17.45	304.38	50
34. ask for help from others to develop your practice?	34.00	100.00	86.12	17.03	289.87	50
35. ask for emotional support for yourself?	0.00	100.00	57.60	28.99	840.60	50
36. tell someone how they could develop their knowledge and skills in supporting pupils with ASD?	2.00	100.00	64.30	29.41	865.01	50

N= Number

Min = minimum

Max, = maximum

SD = Standard Deviation

Standardised Z Scores have a mean of 0 & the SD is always 1. This enables one to easily see where each question lies under a normal distribution curve.

By standardising the scores, all scores will be either 1, 2, or 3SDs away from the mean. About 68% fall within +/- 1SD, 95% fall within +/-2SD & 99.7% +/- 3SD. If Z=1.3 then the original score was 1.3 SDs above the average. If Z=0.55 then the original score was 0.55 SDs below the mean.

Appendix X: TASCA descriptive statistics – "Yes to interview" vs "No to interview"

	interview	N	Mean	Std. Deviation	Std. Error Mean
1.clearly describe the pupil's learning skills and needs?	1.00	29	81.3448	14.60009	2.71117
	2.00	20	72.0000	21.73041	4.85907
2. describe how autism affects the pupil's emotional skills and needs?	1.00	29	82.7931	17.86933	3.31825
	2.00	20	76.0500	16.82565	3.76233
3. describe how autism affects the pupil's social and friendship skills?	1.00	29	86.7931	14.65649	2.72164
	2.00	19	76.0526	24.28642	5.57169
4. modify tasks so that the pupil can carry them out effectively?-	1.00	28	80.7500	14.73123	2.78394
	2.00	20	78.9500	20.98740	4.69293
5. contribute effectively to target setting with parents and professionals?-	1.00	28	68.5714	22.35145	4.22403
	2.00	20	67.1000	29.47952	6.59182
6. use visual approaches to help the pupil to work independently?-	1.00	29	82.6552	14.87394	2.76202
	2.00	20	78.2000	24.58840	5.49813
7. help the pupil to understand others better?	1.00	28	74.2500	17.31543	3.27231
	2.00	19	68.4211	21.04312	4.82762
8. help the pupil to be understood by others?	1.00	29	79.8621	16.78376	3.11667
	2.00	20	72.2000	15.17824	3.39396
9. work on communication targets across the curriculum/through the school day?	1.00	29	73.6897	18.06754	3.35506
	2.00	20	71.4000	21.75074	4.86361
10. assess why the pupil might not behave appropriately within a class or group?	1.00	29	79.9310	15.89009	2.95072
	2.00	20	70.2000	22.55193	5.04276
11. implement a specific programme designed by the teacher to develop learning skills?	1.00	28	80.9643	19.81672	3.74501
	2.00	20	80.9500	20.71225	4.63140

12. collect data to monitor progress towards a target?	1.00	29	75.2759	23.43212	4.35123
	2.00	20	79.5000	24.99579	5.58923
13. implement a social skills programme designed by the teacher?	1.00	28	76.3214	19.73163	3.72893
	2.00	20	74.4000	29.35338	6.56362
14. describe parent/carers' views about the pupil's progress/ strengths and skills?	1.00	29	70.4828	22.88265	4.24920
	2.00	20	66.6500	28.01367	6.26405
15. help the pupil to stay on task?	1.00	29	82.5862	16.18976	3.00636
	2.00	20	73.0000	26.15943	5.84943
16. clearly describe how the sensory environment affects the pupil?	1.00	28	79.3571	22.66702	4.28366
	2.00	20	71.1000	25.84549	5.77923
17. ensure that sensory needs are managed effectively at school?	1.00	28	71.4286	22.97894	4.34261
	2.00	20	66.7000	27.29006	6.10224
18. help this pupil to make friends?	1.00	29	71.3448	19.93610	3.70204
	2.00	20	66.8500	20.71683	4.63242
19. help this pupil to deal with feelings of unfairness?	1.00	29	75.0690	22.90654	4.25364
	2.00	20	56.5000	33.35534	7.45848
20. pre-empt situations that the pupil will find challenging?	1.00	29	83.2069	16.60976	3.08436
	2.00	20	81.5500	19.45163	4.34952
21. use strategies so that the pupil learns independently of the adult?	1.00	28	73.6071	21.54984	4.07254
	2.00	20	67.7000	31.31016	7.00117
22. carry out some assessments of the pupil's progress against targets?	1.00	29	76.0345	19.17119	3.56000
	2.00	19	77.1053	21.81461	5.00461
23. link what is learned in one lesson to other lessons and experiences?	1.00	29	78.3793	17.66031	3.27944
	2.00	20	77.4500	17.44005	3.89971
24. provide feedback that links to the success criteria for the pupil?	1.00	29	82.7586	15.01584	2.78837
	2.00	20	77.4500	22.21065	4.96645
25. use a range of different ways to prompt the pupil?	1.00	29	81.6897	18.75424	3.48258
	2.00	20	84.2500	18.23494	4.07746
	1.00	29	89.8966	12.19293	2.26417

26. modify my own language to support the pupil?	2.00	20	87.1000	16.15680	3.61277
27. connect the task to the pupil's own interests and goals?	1.00	29	80.5862	19.47437	3.61630
	2.00	20	83.0000	18.60956	4.16122
28. talk with the pupil about different ways of working out how to tackle a problem?	1.00	29	80.7931	20.74743	3.85270
	2.00	20	72.5000	33.71787	7.53954
29. explain to others about autism?	1.00	29	79.8621	22.62067	4.20055
	2.00	20	73.5500	27.94256	6.24815
30. know what is motivating for this pupil?	1.00	29	82.7931	19.28060	3.58032
	2.00	20	80.7000	24.37665	5.45078
31. break a skill down into its component parts for the pupil?	1.00	29	78.1034	20.07369	3.72759
	2.00	20	77.9000	23.96906	5.35964
32. ensure that any changes are made clear to the pupil in the way that suits them best?	1.00	29	82.8621	17.30137	3.21278
	2.00	20	79.8500	21.15177	4.72968
33. calm a pupil who is upset or angry?	1.00	29	88.4483	14.99187	2.78392
	2.00	20	80.3500	20.58941	4.60393
34. ask for help from others to develop your practice?	1.00	29	82.2759	20.38889	3.78612
	2.00	20	91.0000	9.61359	2.14966
35. ask for emotional support for yourself?	1.00	29	55.6897	27.81457	5.16504
	2.00	20	58.2500	31.16657	6.96906
36. tell someone how they could develop their knowledge and skills in supporting pupils with ASD?	1.00	29	66.1724	26.75560	4.96839
	2.00	20	59.8000	33.58038	7.50880

Appendix Y: Independent Samples Test results for all TASCA items – "Yes to interview" vs "No to interview"

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
clearly describe the pupil's learning skills and needs?	Equal variances assumed	5.980	.018	1.803	47	.078	9.34483	5.18225	-1.08052	19.77017
	Equal variances not assumed			1.679	30.656	.103	9.34483	5.56426	-2.00872	20.69838
describe how autism affects the pupil's emotional skills and needs?	Equal variances assumed	.289	.593	1.329	47	.190	6.74310	5.07344	-3.46333	16.94954
	Equal variances not assumed			1.344	42.575	.186	6.74310	5.01656	-3.37669	16.86289
describe how autism affects the pupil's social and friendship skills?	Equal variances assumed	5.357	.025	1.914	46	.062	10.74047	5.61222	-.55633	22.03727
	Equal variances not assumed			1.732	26.640	.095	10.74047	6.20089	-1.99076	23.47170
modify tasks so that the pupil can carry them out effectively?	Equal variances assumed	1.003	.322	.350	46	.728	1.80000	5.14900	-8.56439	12.16439
	Equal variances not assumed			.330	31.942	.744	1.80000	5.45654	-9.31541	12.91541
contribute effectively to target setting with parents and professionals ?	Equal variances assumed	1.057	.309	.197	46	.845	1.47143	7.47675	-13.57850	16.52135
	Equal variances not assumed			.188	33.797	.852	1.47143	7.82908	-14.44270	17.38555
use visual approaches to help the pupil to work independentl y?	Equal variances assumed	2.922	.094	.790	47	.433	4.45517	5.63765	-6.88631	15.79665
	Equal variances not assumed			.724	28.565	.475	4.45517	6.15290	-8.13725	17.04760

help the pupil to understand others better?	Equal variances assumed	1.344	.253	1.038	45	.305	5.82895	5.61616	-5.48257	17.14047
	Equal variances not assumed			.999	33.610	.325	5.82895	5.83215	-6.02847	17.68636
help the pupil to be understood by others?	Equal variances assumed	.207	.651	1.632	47	.109	7.66207	4.69529	-1.78364	17.10778
	Equal variances not assumed			1.663	43.544	.104	7.66207	4.60788	-1.62725	16.95139
work on communicatio n targets across the curriculum/thr ough the school day?	Equal variances assumed	1.239	.271	.401	47	.690	2.28966	5.70850	-9.19437	13.77368
	Equal variances not assumed			.388	35.873	.701	2.28966	5.90857	-9.69494	14.27425
assess why the pupil might not behave appropriately within a class or group?	Equal variances assumed	2.935	.093	1.774	47	.082	9.73103	5.48432	-1.30200	20.76406
	Equal variances not assumed			1.666	31.715	.106	9.73103	5.84262	-2.17418	21.63625
implement a specific programme designed by the teacher to develop learning skills?	Equal variances assumed	.037	.847	.002	46	.998	.01429	5.91144	-11.88484	11.91341
	Equal variances not assumed			.002	39.950	.998	.01429	5.95609	-12.02388	12.05245
collect data to monitor progress towards a target?	Equal variances assumed	.013	.911	-.604	47	.549	-4.22414	6.99805	-18.30239	9.85412
	Equal variances not assumed			-.596	39.231	.554	-4.22414	7.08327	-18.54871	10.10043
implement a social skills programme designed by the teacher?	Equal variances assumed	3.211	.080	.271	46	.787	1.92143	7.07760	-12.32503	16.16789
	Equal variances not assumed			.255	30.974	.801	1.92143	7.54890	-13.47519	17.31805
describe parent/carers' views about the pupil's progress/ strengths and skills?	Equal variances assumed	2.652	.110	.526	47	.602	3.83276	7.29078	-10.83440	18.49991
	Equal variances			.506	35.420	.616	3.83276	7.56928	-11.52719	19.19271

	not assumed									
help the pupil to stay on task?	Equal variances assumed	6.547	.014	1.585	47	.120	9.58621	6.04674	-2.57827	21.75069
	Equal variances not assumed			1.458	28.991	.156	9.58621	6.57678	-3.86500	23.03741
clearly describe how the sensory environment affects the pupil?	Equal variances assumed	1.684	.201	1.174	46	.247	8.25714	7.03552	-5.90463	22.41891
	Equal variances not assumed			1.148	37.621	.258	8.25714	7.19369	-6.31055	22.82483
ensure that sensory needs are managed effectively at school?	Equal variances assumed	1.092	.301	.650	46	.519	4.72857	7.27547	-9.91618	19.37332
	Equal variances not assumed			.631	36.525	.532	4.72857	7.48970	-10.45367	19.91081
help this pupil to make friends?	Equal variances assumed	.024	.877	.763	47	.449	4.49483	5.88740	-7.34909	16.33875
	Equal variances not assumed			.758	39.959	.453	4.49483	5.92996	-7.49046	16.48011
help this pupil to deal with feelings of unfairness?	Equal variances assumed	9.977	.003	2.314	47	.025	18.56897	8.02535	2.42405	34.71388
	Equal variances not assumed			2.163	31.135	.038	18.56897	8.58617	1.06042	36.07751
pre-empt situations that the pupil will find challenging?	Equal variances assumed	.027	.871	.320	47	.750	1.65690	5.17759	-8.75908	12.07287
	Equal variances not assumed			.311	36.628	.758	1.65690	5.33212	-9.15071	12.46451
use strategies so that the pupil learns independently of the adult?	Equal variances assumed	2.616	.113	.775	46	.442	5.90714	7.62045	-9.43202	21.24631
	Equal variances not assumed			.729	31.496	.471	5.90714	8.09950	-10.60136	22.41565
carry out some assessments of the pupil's	Equal variances assumed	.493	.486	-.179	46	.859	-1.07078	5.97585	-13.09953	10.95797

progress against targets?	Equal variances not assumed			-.174	35.055	.863	-1.07078	6.14164	-13.53828	11.39672
link what is learned in one lesson to other lessons and experiences?	Equal variances assumed	.014	.907	.182	47	.856	.92931	5.10735	-9.34535	11.20397
	Equal variances not assumed			.182	41.344	.856	.92931	5.09534	-9.35833	11.21695
provide feedback that links to the success criteria for the pupil?-	Equal variances assumed	3.065	.087	1.000	47	.323	5.30862	5.31000	-5.37373	15.99097
	Equal variances not assumed			.932	30.790	.359	5.30862	5.69567	-6.31099	16.92823
use a range of different ways to prompt the pupil?	Equal variances assumed	.833	.366	-.475	47	.637	-2.56034	5.39058	-13.40480	8.28411
	Equal variances not assumed			-.477	41.754	.636	-2.56034	5.36227	-13.38374	8.26305
modify my own language to support the pupil?	Equal variances assumed	.243	.624	.691	47	.493	2.79655	4.04941	-5.34981	10.94291
	Equal variances not assumed			.656	33.364	.516	2.79655	4.26363	-5.87428	11.46739
connect the task to the pupil's own interests and goals?	Equal variances assumed	.114	.737	-.434	47	.666	-2.41379	5.56016	-13.59939	8.77180
	Equal variances not assumed			-.438	42.202	.664	-2.41379	5.51302	-13.53794	8.71036
talk with the pupil about different ways of working out how to tackle a problem?	Equal variances assumed	6.264	.016	1.066	47	.292	8.29310	7.77771	-7.35364	23.93984
	Equal variances not assumed			.979	28.882	.335	8.29310	8.46688	-9.02669	25.61289
explain to others about autism?	Equal variances assumed	1.459	.233	.872	47	.388	6.31207	7.24014	-8.25321	20.87734
	Equal variances not assumed			.838	35.180	.407	6.31207	7.52888	-8.96957	21.59371

know what is motivating for this pupil?	Equal variances assumed	.317	.576	.335	47	.739	2.09310	6.24532	-10.47086	14.65706
	Equal variances not assumed			.321	34.566	.750	2.09310	6.52148	-11.15216	15.33837
break a skill down into its component parts for the pupil?	Equal variances assumed	.304	.584	.032	47	.974	.20345	6.31680	-12.50431	12.91120
	Equal variances not assumed			.031	36.096	.975	.20345	6.52846	-13.03565	13.44255
ensure that any changes are made clear to the pupil in the way that suits them best?	Equal variances assumed	.122	.729	.547	47	.587	3.01207	5.50867	-8.06995	14.09409
	Equal variances not assumed			.527	35.457	.602	3.01207	5.71768	-8.59009	14.61423
calm a pupil who is upset or angry?	Equal variances assumed	.543	.465	1.595	47	.117	8.09828	5.07840	-2.11814	18.31469
	Equal variances not assumed			1.505	32.487	.142	8.09828	5.38019	-2.85436	19.05091
ask for help from others to develop your practice?	Equal variances assumed	7.716	.008	-1.778	47	.082	-8.72414	4.90704	-18.59582	1.14755
	Equal variances not assumed			-2.004	42.460	.052	-8.72414	4.35382	-17.50769	.05941
ask for emotional support for yourself?	Equal variances assumed	.267	.608	-.302	47	.764	-2.56034	8.49189	-19.64383	14.52314
	Equal variances not assumed			-.295	37.855	.769	-2.56034	8.67441	-20.12297	15.00228
tell someone how they could develop their knowledge and skills in supporting pupils with ASD?	Equal variances assumed	4.523	.039	.738	47	.464	6.37241	8.63373	-10.99642	23.74125
	Equal variances not assumed			.708	34.758	.484	6.37241	9.00372	-11.91066	24.65549

Appendix Z: Semi-structured interview questions

Introduction (the aims are described);
warm-up (easy questions to start);
main body (a focus on the main research focus)

Have you completed EarlyBird Plus training?

Have you completed Cygnets training?

Have you completed any other ASD specific training?

How do you know what you need to do?

Who has helped you to understand how to support a child with ASD?

Do you have protected planning and liaison time with the class teacher?

Do you feel that the demands of your work are clear?

Is your job manageable?

Do you feel that your work is valued in the setting?

Is what you are asked to do achievable?

What are the barriers to you doing your job effectively?

Is there anything that stops you doing what you would like to do?

Is there anything that stops you doing what you feel you should do?

How would you describe your relationship with the teacher? Other staff?

What are other's views about including children with ASD?

What do you feel helps you to do your job effectively?

What support would help you to be more effective in doing your job?

cool-off (simple questions to conclude)
closure - thanks the interviewee for her contribution.

(Based on Hayes, 2000)

Appendix AA: Semi-structured interview prompts

Content mapping

Widely framed to open up the subject matter. Minimal probing.

Why is that? What makes you say that?

Dimension mapping questions

Focus the participant more upon the particular topics or concepts.

Signpost, structure and direct the interview.

Focus on topics raised above and uncover elements of the concepts.

Perspective widening questions

Encourage the participant to look at the issue from different perspectives.

Stimulate further thought and comprehensive reflection.

Prompt to stimulate discussion of researcher's key interest

I'm wondering about….

I'm thinking what would happen where…..

Others have mentioned….do you see that as relevant?

Check out all sides of the participant perspective; You said x, but what about y….

Would you say something different in x situation?

Content mining questions

Questions to explore the full description of phenomena.

Trying to understand attitudes and behaviours.

Full use of probes: Amplificatory

Exploratory

Explanatory

Clarificatory

Amplificatory: You said…Can you tell me more about that?

Can you give me an example of that?

What exactly was the issue about that?

What did they do or say to make you think that?

Exploratory: Why?

How did you feel?

How did you respond?

What effect did that have on you?

How did that change what you did?

What makes you say that?

Clarificatory: How was it X?

You said y - what exactly did you mean?

You said x but might you have y?

Some people might have thought X. Did you ever think about that?

You said x earlier and now you seem to be saying y….

In-depth iterative probing

Use a level of clarification and detail that goes beyond everyday conversation. Elicit all factors at work.

Question formulation

Use broad and more narrow questions

Avoid leading questions

Ask short and clear questions

(Based on Ritchie and Lewis, 2009).

Appendix BB: Email to participants for the semi-structured interview.

Dear (name),

Many thanks for your recent completion of the online questionnaire examining Teaching Assistant (TA) views on their capability to support children with Autism Spectrum Disorder (ASD). You ticked the box at the end of this questionnaire to indicate that you might be happy to take part in a semi-structured interview with me to explore the issues further.

Taking part would provide a great opportunity to give your views in relation to what helps you to support children with ASD effectively.

Any information you provide will be held confidentially, and the data will be anonymised at the end of the study. As a participant you are able to ask for the information I provide to be deleted/destroyed at any time up until the data has been anonymised and will have access to the information up until this point. Data will be destroyed after it has been transcribed. You would be at liberty to withdraw from the process at any time.

On this basis, I am wondering whether you would still be happy to go ahead? If so, please let me know by replying to me at the address above as soon as you have made a decision and I will arrange to come to meet you wherever and whenever is most convenient.

With kind regards,

Louise Lombardi

Appendix CC: Consent form - semi-structured interview

Semi-structured interview - Consent Form

I understand that I am being asked to take part in this project, which aims to explore how capable Teaching Assistants feel in supporting children with Autism Spectrum Disorder (ASD).

I understand that my participation in this project will involve me taking part in a semi-structured interview lasting approximately one hour.

I understand that my participation in this study is entirely voluntary and that I can withdraw from the study at any time without giving a reason.

I understand that I am free to ask any questions and discuss my concerns with the researcher Louise Lombardi, at any time.

I understand that the information provided will be held confidentially, so that only the researcher can trace this information back to me individually. I understand that my data will be anonymised at the end of the study and that after this point it will be impossible to trace my information back to me. I understand that I can ask for the information I provide to be deleted/destroyed at any time up until the data has been anonymised and I can have access to the information up until the data has been anonymised. I understand that this data will be destroyed after transcription is complete.

I also understand that at the end of the study I will be provided with additional information and feedback about the study.

I, _____ give consent to participate in the study conducted by Louise Lombardi, supervised by the School of Psychology, Cardiff University.

Signed:

Date:

This project has been reviewed and ethically approved by the School of Psychology, Cardiff University

Supervised by Dr Kyla Honey, School of Psychology, Cardiff University, Tower Building, 70 Park Place, Cardiff. CF10 3AT. Tel: 029 2087 0360. HoneyK1@cardiff.ac.uk

If you have any complaints you can contact the Secretary of the Ethics Committee, School of Psychology, Cardiff University, Tower Building, Park Place, Cardiff. CF10 3AT. Tel: 029 2087 0360.

Appendix DD: Debrief form - Semi structured interview

Study Title: Exploring Teacher Assistant SE in relation to supporting children with ASD

Thank you very much for your participation in this study.

About this Study:
The intention behind the proposed study was to explore how capable Teaching Assistants felt in supporting children with Autism Spectrum Disorder (ASD).

Teaching Assistants contributed to a focus group to develop items for a SE questionnaire.

This questionnaire was then piloted and more widely distributed to gain an idea about how capable Teaching Assistants felt in supporting children with ASD.

Some of those who completed the questionnaire were invited to a discussion with the researcher to look at the issues in more depth.

The information gained from these semi-structured interviews will identify those aspects of the role in which TAs believe that they are more capable and less capable, and will contribute to a review of the training and support offered to TAs. In addition, it will be shared with key education staff including Educational Psychologists and Specialist Teachers to support their knowledge and understanding. At no point will it be possible for individual responses to be traced to individuals.

The data in this study is held confidentially. You have the right to withdraw your data without explanation and retrospectively up until (Date) at which point the interview data will be anonymised.

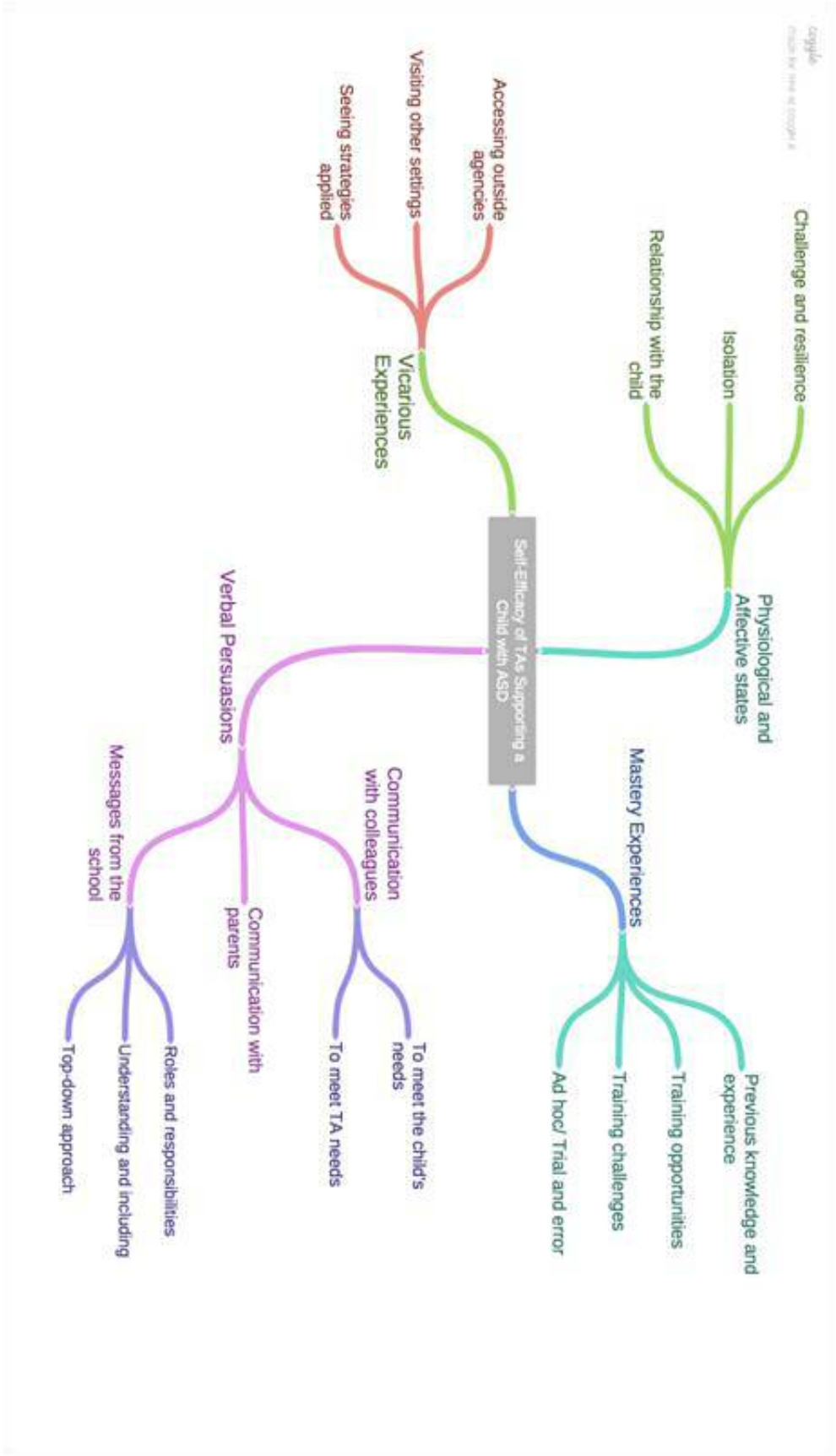
If you have any questions, or would like to know more about this research, then please contact the researcher or supervisor as below:

Louise Lombardi, Area Senior Educational Psychologist (contact details).

Supervised by Dr Kyla Honey, School of Psychology, Cardiff University. Tower Building. 70, Park Place, Cardiff, CF10 3AT. 02920870360

If you have any complaints please contact: The Secretary of the Ethics Committee, School of Psychology, Cardiff University, Tower Building, Park Place, Cardiff CF10 3AT. Tel: 029 2087 0360.

Appendix EE: Semi-structured interview thematic map – analysis in relation to the four sources of self-efficacy



Appendix FF: Thematic analysis of semi-structured interview data – further exemplars

4.5.1. Overarching theme 1: Mastery experiences
4.5.1.1. Theme 1: Previous knowledge and experience - low scorers
Lisa: *my own, the lack of experience really.*
Lisa: *I think they're just glad that someone's sitting there, really, yeah. It is a bit tricky.*
Lisa: *R.'s got her son, he's grown up now, but her son was that way, so she's got a lot more experience.*
Lisa: *the TA there has really just fallen into it,*
Lisa: *I have looked at a few things, particularly online. I've always been happy to, because obviously it makes your own life easier if you look up things doesn't it, or try and find out.*
Lisa: *sometimes just doing the job is obviously the best thing to learn*
Laura: *you were given the easier ones to start with, and you learned the ropes that first year and then gradually it could get more difficult*,
Laura: *I know my skills and my skill set, so that would probably be the high functioning autistic one that I can interact with, but if you've got somebody that kicks off, I'm a bit old school and I dig my heels in which isn't the way to go,*
Laura: *even given my parental experience,*
Laura: *Afternoons are very instinctive, you hopefully know your child well enough, certainly by the end of the year you know, you differentiate.*
Laura: *A big complaint that we had is that we don't do Makaton, we should use it quite a lot but we don't.*
4.5.1.1. Theme 1: Previous knowledge and experience - high scorers
Hannah: *studying before helped me*
Hannah: *until you really read about it any try and understand it it can be difficult to understand… it can appear to some people like, oh they're just not listening or they just don't want to do that. But it's not.*
Hannah: *when I started working in a school, I was working with an autistic child and I didn't really know many strategies I just knew about autism and the impairments of it*
Hannah: *I do try and pick and choose the strategies, mix it up a bit, and I don't always get it right believe me, I do get it wrong!*
Helen*: I've worked mainly from intuition.*

4.5.1.2. Theme 2: Training - opportunities - low scorers
Laura: I think I could do with the tools, just generally as part of the job. But it's everything else that comes with the training as well.
Laura: we do have training during the year,
Laura: we had a couple of children with autism, so they did a whole staff training day with Makaton, and it was brilliant!
Laura: even if you've just got one lone child in the mainstream school, it's even more important to have that child… and to have that regular training.
Laura: even though I've been doing it for a long time, I could do with a catch up and a brush up, and a reminder of things. Because you get stuck in a way of doing things.
Laura: I need to hear and speak and do.
Lisa: And I think going on courses,
Lisa: you do get not only the course, but then you get to talk to other people doing the same role
Lisa: I'm going on a half day course in July, which is dealing with children in the classroom, and I had a half day one earlier in the year for (something)
4.5.1.2. Theme 2: Training - opportunities - high scorers
Hannah: I was sent on the EarlyBird course, and that was absolutely brilliant. it just gave me so many strategies, so I suppose I got a lot from there.
Hannah: I've done some courses at B… And just various other ones
Hannah: I've been on the ELSA course so a lot of what I build in to our daily routine is a lot of ELSA. It's not classed as actual ELSA time…
Hannah: they'll say 'but i'm in my PE kit, I have to wear my trainers,' and something so small can really affect someone. So I think training is definitely important.
Hannah: I am lucky I have done quite a lot of courses and quite a lot of training
Hannah: if you haven't been on those courses then you don't really think that way. I think you learn to do it, and as I said I don't always get it right.
Hannah: We do have quite a lot of training, and we have Inset days, I know that the Inset day we had recently, the other lady who is an ELSA here did stuff on emotional support, and there were lots of different stations and all the TA's went round, and the other deputy who will be taking over as head came and looked around, so that was good.
Hannah: there are definitely some courses I want to go on. I really want to go on the draw and talk course, all of the draw and talks.

Hannah: I do like all kinds of courses, so any information I can get. Because it all helps, even if you just take a little bit from each thing and you use what's necessary for you in that situation.
Helen: ELSA - It was a good starter for those people who hadn't come into contact with anybody with ASD,
Helen: I haven't had any other training, other than SENCO training, so the SENCO would give us tips to start with,
4.5.1.3: Theme 3: Training - challenges - low scorers
Laura: t's the application of which is a big thing,
Laura: more communication, more training, more time out to train, maybe in summer holidays.
Laura: I don't think I would learn very well online
Laura: inset days aren't for us, and we don't have enough insets specifically for that.
Laura: Sometimes we have half an hour training at the beginning of the week, but it's never enough.
Laura: I don't get it enough as I haven't had enough training. (PDA)
Laura: I think I could do with the tools, just generally as part of the job. But it's everything else that comes with the training as well.
Laura: we don't have any external training. We're not sent off, I haven't been on a course in the longest time, not even anything where we as a group get sent out.
Laura: it's half an hour, and what can you learn in half an hour.
Laura: if you're part time, or even if you're full time, you'll have to go on a training session and they will have to pay for someone to cover you. If you're not investing, you're on a back foot.
Laura: So yes I probably would do now, because I have much more time as such.
4.5.1.3: Theme 3: Training - challenges - low scorers
Helen: so she was very good and she had more time and she was able to feed the strategies down. Now in a bigger school I think it's more difficult, but she still tries to feed it down, but we do it again on inset days, but she then uses the expertise of the people she has in school to present things. She has done a presentation on ASD techniques.
Hannah: I think sometimes it's a problem, getting people out [of school.] Because if you're the only person who can be there with the child,

Hannah: there is a push towards that, a push to not, 'if they don't do it this way then that's it.' Because there are a lot of ways people can learn, it's just not always the same way. So yeah, I suppose it has probably come from the top down, from the senior management through to the teachers
4.5.1.4. Ad hoc/ trial and error - low scorers
Lisa: it's just distracting his attention and getting him on board, that's what I find hard.
Lisa: if he really doesn't want to do something, I find it very difficult to… If I lose him, it's getting him back on, task,
Lisa: If he doesn't understand the instructions straight away, that's when he flips straight away. If he doesn't get it straight away.
Lisa: sometimes it's best if you know what you're doing. So you say, "come on, we'll start it outside."
Lisa: I like distractions, and then he has these soft things, I usually find something for that
Lisa: I do feel at this stage I'm still learning a lot.
Lisa: But you're not, because you often fall into it.
Laura: because I've been doing it a long time it is probably an innate thing.
Laura: there was a lot of innate experience and support-
Laura: you learnt by osmosis.
Laura: It's instinctive, it's become instinctive.
Laura: Afternoons are very instinctive, you hopefully know your child well enough, certainly by the end of the year you know, you differentiate.
Laura: if you think they can do more you do more, and if you think it's too much you can take them out for a walk, or go on a break or whatever, we just tailor it as much as we can to the child.
Lisa: especially if it hasn't gone too well you think oh, was it me, and how I'm going to do it different next time?
4.5.1.4. Ad hoc/ trial and error - high scorers
Hannah: things I've just picked up
Hannah: also just reading as well. Thinking, 'okay, this isn't working, let me just go and research what I could do here', or, what might work
Hannah: And, trial and error. Sometimes I've tried things and thought, that's not going to work.

Hannah: you have something that you think would definitely work, and then you start doing something and you can see it's not working
Helen: I'm always watching the TV, you know TV programmes come on about ASD and you go "oh, I wonder what sort of techniques they've been using?", they're interesting, and I've been onto the autism website and I've read various things and it's just helped me understand a little bit more, the condition, but actually, every child with autism is different,
Hannah: we do five minutes of learning, five minutes of free time, which obviously is quite a lot of free time to fill in the gaps. But he can only really cope with a short burst of learning, then a rest break.
Hannah: When I first took over working with him, he was having difficulties at school and he was aggressive at times, but I found if I verbally told him, "okay, we're going to stop doing that in this amount of time, we're going to do this," he doesn't like to be told what to do.
Hannah: They get a lot of emotional support, and a place to contain what they need to contain before they start the work, because it's hard to start work if you've got a lot of other things going on isn't it.
Hannah: he was so stuck on things that had happened that he would just spend nearly all of our day talking and crying about that. So we had to get through that first, because it wasn't just the autistic traits that were a barrier to everything else,
Hannah: So to practise for our phonic screening, because I know he will not attempt to sound the words out off the sheet, I had either magnetic letters or the big phonic letters and we used those.
Hannah: if it goes wrong then I would try and think, okay let me learn what was the trigger there what happened…. analysis sheets, so what happened before a certain behaviour and what happened after, and they can sometimes be really helpful.
Hannah: he tries to manipulate the time himself and he'll pause it, or he'll try and flip it to the other way, and i'll say, "I'm just going to wait until the timer's back the right way," and then he will turn it back, so that's helped him. We started with a 'now and next', and that worked perfectly in the beginning,
Hannah: other people have tried the same thing and it's been working fantastically, so sometimes it's just knowing the child and getting to know them. As well as having autism, they are a person who has their own personality traits anyway aside from that.
Hannah: some of the targets are not always clear because you might have a target there, and then you might start working on it and realise actually, there are x amount of things that need to be done before we even get remotely close to that target.
4.5.2. Overarching theme 2: Vicarious experiences
4.5.2.2. Theme 2.1: Accessing outside agencies - low scorers

Laura: think (the LA) has Laurauced the places available, and schools are shutting, and there's nowhere to put those ones that really need to be somewhere special. There's less provision.
Laura: Whenever (ASD Advisory staff) have come in, I've always found them incLauraible fascinating, as much as anything, and it actually re-engages you with what you've got to do.
Laura: the educational psychologist was really good, he came in for ten minutes and picked up so much, and it was really interesting
Lisa: they have had quite a lot more outside help
4.5.2.2. Theme 2.1: Accessing outside agencies - high scorers
we do have LB people coming in and they will sometimes observe children and then speak with the TAs, give tips, advise.
Sometimes I think it is nice if you have the TAs and the teachers together, because you're not just passing on information you've had it straight from the professional's mouth, so you might be more likely to give it a try.
Helen: they come into the school, and they'll talk to the SENCO, but they haven't come in and talked to the whole school or anyone working with children, other than coming in to assess a child, and then you get to meet them.
4.5.2.3. Theme 2.2: Visiting other settings - low scorers
Laura: Because it's just the little things that they do. I mean some things that they suggest you can't really do, because it's a mainstream school, but you can take ideas away from them.
Laura: it might help if they were allowed to go to other schools, so all go to schools with the unit to see what they do and what they have on a day to day, that might help. Because within a mainstream school you're kind of run by what's going on in the classroom, and you're trying to fit in around that. Whereas I think all of us, if we could go to another school and observe.
4.5.2.4. Theme 2.3 Seeing strategies applied - low scorers
Laura: some staff who, they are just amazing and I put them on a pedestal because I think it's an innate thing they have, they just get it.
Laura: you're looking around and you're seeing…
Laura: I need to hear and speak and do.
Laura: after I had been there about a month I just fell in love with this lady. She was brilliant, so I felt that I learnt a lot with he, and XX was really good, she really knew her stuff, but they were very good for experience.
Laura: Just watching how they deal with some of our tricky ones, so it's observing.

Laura: I think we need to do more of that, I think we need to be allowed to be given the time to go and observe, even the younger ones go and observe, because I think if you watch someone in action- what do they do, what sort of things do they say, how do they say it, and how it works, then you can pick that up.
Lisa: I think i could have done with a lot more if just watching her a lot more.
Lisa: I think R.'s most probably better at adapting it than me. I noticed today, because I was in there for a short while, I thought, "oh, thats a good idea."
4.5.3. Overarching theme 3: Verbal persuasion
4.5.3.1 Theme 3.1: Communication with colleagues
4.5.3.1.1. Sub theme 3.1(a) To meet the child's needs - low scorers
Lisa: now stays on half an hour longer on a Wednesday afternoon, and we usually get about twenty minutes of overlap, so at least we can, so that's quite helpful
4.5.3.1.1. Sub theme 3.1(a) To meet the child's needs - high scorers
Hannah: if someone is really struggling or if someone says I really can't work with that person, then they will move them on to somebody else.
4.5.3.1.2. Sub theme 3.1(a) To meet the TA's needs - low scorers
Lisa: I myself would like more guidance,
Lisa: She's got more experience than me but she's my support really, cos she's got a lot more
Laura: if something goes wrong no one blames you, you've got a lot of support and if it goes really wrong, people will step in and help, so you're not on your own. it's quite secure, you feel secure
Laura: we try, the ones that are left from the old days, we do try to step in, but you're not always given the opportunities or the time to do that.
Lisa: I definitely think something like a support group, where you do have that emotional support really, from other people doing the job at all different stages really,
Laura: regular meet ups with your other staff so you can check in, you have regular training.
Laura: The perfect world would be, if you're coming in as a new person, I mean I did have a mentor when I started but that's one of the ways, you have a mentor.
Lisa: talking to others, things like group supervision or support, that sort of thing…yes, I think both of us would benefit from that.
Lisa: obviously everyone's got different ideas and opinions
4.5.3.1.2. Sub theme 3.1(a) To meet the TA's needs - high scorers

Helen: fact there isn't time to be able to discuss individual children, unless you have a very high level child that a lot of people would come across.
Helen: We used to have a weekly meeting at the school, where each child with particular difficulties was discussed, and all of the TAs were made aware of the particular difficulties and how you should handle those children, which was amazing
Helen: there was a lot more free flow of conversation between staff and TAs, and you could have those conversations which you just don't have time for here, because it's a large school.
Hannah: Well, I suppose you can always talk to each other, and the teachers, and if you've got a problem you can go and speak to the senior management. There is meetings once a week for TAs, although usually I don't really attend because i'm with my little boy….. I think if someone was really struggling or they found it difficult, then they could go and say look, i'm really struggling here, can you give me some help or support i'm not really sure what to do.
Hannah: I wouldn't say there's necessarily a dedicated time or place to do it, like what I would call a supervision. But, there is a meeting where people discuss things, whats going to be happening and what's going on.
Hannah: handover book, and knowing that you're both on exactly the same page…. So maybe some time built in for the TAs, where there is a handover period. This happened today, this went wrong or this went well, and why this went well today. I definitely think that's missing.
Hannah: actually I think it probably would be a good idea. Even if it was just once a month or once a term, just to have a sit down and have someone listen to you, 'oh I found that really difficult when such and such was doing this,' because obviously sometimes things do happen that do raise emotions, that's only natural that things happen, so actually I think that probably would be a good idea actually.
4.5.3.2. Theme 3.2: Communication with parents - low scorers
Laura: tend to try and develop if I can, a really good [relationship]
Laura: one parent came up and gave me a massive big hug on Tuesday, we correspond, we get on really well, and she is the most supportive parent- just the sort of parent you would want, 'my child's doing this, you've got my permission,' just what you would want. And then another parent who does nothing, absolutely nothing.
Laura: So having a good parental relationship is good, because you get the best for the children, and it's consistent.
Lisa: She comes in to the front, but then of course P.'s there, so you're a little bit limited. Sometimes that can work well, because if he's had part of a day that's not good he'll say, "you're not going to tell mum." and I'll say, "well yeah".

Lisa: I do find that the mum will tell R. something, and then the SENCo something, and me something, so you have to be a little bit careful because you can't always believe
Lisa: I do find that the mum will tell R. something, and then the SENCo something, and me something, so you have to be a little bit careful because you can't always believe
Lisa: She is going down the line now, which me and R. are not so sure on, of anxiety, but i'm not 100% sure it's really that…I think she was thinking of taking him to the doctors to get some tablets.
4.5.3.2. Theme 3.2: Communication with parents - high scorers
Hannah: (EB) It was really helpful because that mum in particular was very supportive.
Hannah: I'm really lucky because most of the parents I've worked with have always been really supportive.
Hannah: whatever we put in we all did together and we did it at home and at school. I suppose it depends if you've got families who are really on board and who are on board with the diagnosis, and they want to put all the things in the place. It is a lot to carry out every day- a visual for this, a visual for that. I mean, to be at home and have to do that all the time is difficult,… And the grandma was brilliant as well.
4.5.3.3. Theme 3.3: Messages from the school
4.5.3.3.1. Subtheme 3.3(a): What are our roles and responsibilities? - low scorers
Laura: It gets a bit blurry who is in charge of who.
Laura: Some teachers in the mainstream are better at differentiating than others, and they don't always plan.
Laura: A lot of teachers don't differentiate the work they very much leave you to it, they're not part of it.
Laura: They suddenly change things … so you're thinking, you know that's a Whoops moment.
Laura: It's not consolidated, some teachers are better than others.
Laura: sometimes teachers, they way they interact with them… They either patronise them, and actually they don't need patronising, or they just don't sight something because they're being a bit hard of them.
Laura: I never feel like the mainstream teachers know our children really well. A few, some of them, the good teachers. But some, they leave them too much to us.

Laura: No, and this is a big thing, I think this is always a big thing, you go into mainstream and there is so much language being thrown at them, sometimes they don't change the visual timetable on the board until too late, so the children like to come in and they like to see what's happening. There's probably, I think there could be more use of the interactive whiteboard and more visual stuff.
Lisa: A: Not a lot, no. Not a lot really. I think just, I think they're just glad that someone's sitting there, really, yeah. It is a bit tricky.
Lisa: the teacher itself needs to be a good support,
Lisa: I certainly think it needs a bit of teamwork in the classroom.
Lisa: until I walk in I don't really know what I'm doing on that Thursday morning, and that isn't great.
Lisa: He's not actually planned separately for,
Lisa: sometimes you need the suggestions there and then don't you,
Laura: We used to be part of the IEPs but we don't seem to be included in that now. And I think that's a shame, because we know the children really well.
4.5.3.3.1. Subtheme 3.3(a): What are our roles and responsibilities? - high scorers
Hannah: as we've moved on as a school, we've all come on the same site, one of our deputies is new, and they're really into inclusion and understanding the special educational needs of children, and what's going to make them successful.
Hannah: there is a push towards that, a push to not, 'if they don't do it this way then that's it.' Because there are a lot of ways people can learn, it's just not always the same way. So yeah, I suppose it has probably come from the top down, from the senior management through to the teachers
Hannah: You do get the odd people who are like, 'this is the way it's always been, so thats how it's going to be.'
Hannah: why is such and such playing a game.' So sometimes I think there need to be more education
Hannah: you could go and say, I'm just a little bit unsure, could you tell me exactly what I need to work on with this child. I suppose that's a bit of a difficult question because you could find out what to work on, couldn't you, you could make that your priority.
Hannah: the senior management, often the SENCo or the deputy, they will say, "do you want to play a game, or do something?", and then it will be time to do the work and you can think about what went wrong.
Hannah: probably now, most people are becoming a lot more aware, in our school, of the needs of a child with autism.

Hannah: maybe in that sense, in the school there may be a bit of divide.
Hannah: I just get the plans and then I differentiate them as needs be.
Hannah: It can be difficult sometimes, say if you have a supply teacher or someone come and, and you have to try and explain, 'well, he's going to be doing this.'
Helen: the class teacher I'm working with at the moment is very organised and I know what we're doing, and we get the planning, and I know her expectations for the child. So actually it's easier, once you know somebody expectations for the child it's easier to plan what you're going to do
Helen: I think it depends on the teacher. First one I worked with in the school didn't want anything to do with the child, I think he felt he wasn't capable of dealing with the child, so he'd much prefer to leave it to us.
Helen: unfortunately the teacher wasn't that intuitive, so often actually something he said or did would inflame the situation, and you'd then be back pedalling to try and bring everything back again.
Helen: other teachers are very good, but I think for a lot of planning… they have the basic school plan, and the plan for the day, which they would communicate with you, and then you would differentiate the work with the child.
Helen: it depends on the teacher you're working with, again. It's purely on a class by class basis
4.5.3.3.2. Subtheme 3.3(b): Understanding children with ASD - low scorers
Lisa: A: Not a lot, no. Not a lot really. I think just, I think they're just glad that someone's sitting there, really, yeah. It is a bit tricky.
Laura: It's not going to be good enough to be given these children and just wing it. and I think there's too much winging of it. That's my view.
Laura: Right, think on your feet. So I hate that. And that generally, so it's this floppy flappy floppy, nothing specific, we need some more guidance.
Laura: Its not good enough. I've always said now I'm glad my son didn't go, I would be worried, if I knew what I knew.
Laura: like the lack of understanding throughout the school,
4.5.3.3.2. Subtheme 3.3(b): Understanding children with ASD - high scorers
Helen: don't think in this school they are as good at differentiation
5.5.3.3.3. Subtheme 3.3(c): Including children with ASD - low scorers
Laura: We had a lot of feedback
Laura: a lot of talks and a lot of meetings, so if a child was kicking off or whatever, it would be fed back and we'd all know how to deal with that child.

Laura: culture of communicating has been lost.
Laura: we had a very strong team so in the olden days, we very much supported each other.
Laura: They're talking about the inclusivity of it, but I don't think it's inclusive as it used to be.
Helen: there was a lot more free flow of conversation between staff and TAs, and you could have those conversations which you just don't have time for here, because it's a large school.
Hannah: space is an issue. I think this may just be in a mainstream school, especially if the school is large, if you're at one end of the school with a child who's having a wobbly day and your calm space is miles away, that can be difficult.
Hannah: it is not very inclusive, but just I suppose that's just a feeling you can't help feeling if you're in a situation where things are going wrong.
5.5.3.3.3. Subtheme 3.3(d): A top-down approach - low scorers
Lisa: the head here, she is very supportive.
Laura: SENCo was extremely knowledgeable and that did filter down.
Laura: The head kind of leaves the centre to the SENCo, she does have an understanding she's very sweet, but I don't think she's got the force of nature which is required.
Laura: the senior leadership are supportive in the sense that they know we're doing a tough job, and they will support you.
4.5.4. Overarching theme 4; Physiological and affective states **4.5.4.1. Theme 4.1: Challenge and resilience - low scorers**
Lisa: I've not actually really worked with a one to one before so it can be a bit challenging
Lisa: It's difficult.
Lisa: Sometimes I think you just need to walk away really. I think sometimes a situation where someone else steps in.
Lisa: you don't want to be seen like you can't, like you're failing it,
Lisa: it's horrible when he, that's when he starts being really not nice, and aggressive.
Laura: I hate art with kids with autism, just because you'll come in and they'll say, 'we're doing portraits.' Okay how can I make this fun for two hours,
Laura: sometimes it's just easier to take them back into the unit because there's lots of resources and good stuff. But then you think, well that's not really the point.

4.5.4.1. Theme 4.1: Challenge and resilience - high scorers
Hannah: in the beginning, I can definitely remember a child who was more traumatised. But I suppose over time I've learnt more techniques and strategies, I've probably become more resilient and desensitised,
Hannah: Because sometimes I think it's really hard,
4.5.4.2. Theme 4.2: Isolation - low scorers
Lisa: you are a bit on a limb
Laura: if you're a TA in a mainstream on your own, with a difficult child, it's quite an isolating feeling actually.
4.5.4.2. Theme 4.2: Isolation - high scorers
Hannah: I think it can be difficult because it can be quite isolating
Hannah: working in a corridor far away from the rest of the school from 8.45 to 12 o'clock with one adult… can be a bit boring for you.
Hannah: Depending on your personality, or, if you are chasing a child around school all day and there's no one else around it's just you and you're trying to find them, that can be difficult for anyone I think…. I definitely think sometimes as a job it can be quite isolating, and a little bit removed from the rest of school life.
Hannah: it is not very inclusive, but just I suppose that's just a feeling you can't help feeling if you're in a situation where things are going wrong.
4.5.4.3. Theme 4.4: Relationship with the child - low scorers
Lisa: We had one day which was dreadful, he just, when people wanted to play with him he got really mean in the playground, pushing and shoving and really not nice, but I think it was just an overload.
Lisa: he's very disruptive
Lisa: another child who's a bit disruptive as well and neither will give in
Lisa: it's horrible when he, that's when he starts being really not nice, and aggressive.
Lisa: he's quite a nice little character, he has his nasty side
Lisa: sometimes I think he is a bit spoilt as well.
Lisa: I agree with that, yes. There's usually a glass of wine that night.
Lisa: We have a good relationship though, because I don't think it would work
Laura: I know my skills and my skill set, so that would probably be the high functioning autistic one that I can interact with, but if you've got somebody that kicks off, I'm a bit old school and I dig my heels in which isn't the way to go,

Laura: So there are times like that when you just think, I could kill myself now.
Laura: for somebody new, it could be quite scary.
Lisa: We had one day which was dreadful, he just, when people wanted to play with him he got really mean in the playground, pushing and shoving and really not nice, but I think it was just an overload.
Lisa: sometimes if you go round and stroke his back to calm him down from behind that seems to work, and R. does that quite a lot as well.
4.5.4.3. Theme 4.4: Relationship with the child - high scorers
Hannah: I've had quite a lot of really difficult and aggressive and violent children,
Helen: I really warmed to him, I loved him, but he was a very very difficult character to work with.
Hannah: There have been times when I first started that I definitely felt anxious, but I suppose over time for me that has lessened.
Hannah: I remember one child who was really distraught, and had really lost it. And to see someone that far gone can be quite upsetting sometimes.
Hannah: I don't feel threatened. I know there are other people at the school- Tuesdays are my day off- I know other people who work with him do feel quite nervous sometimes.
Hannah: I think that comes from working with the child, you have to know them just a little while to get to know them.
Hannah: unhealthy relationship, because even your own children you don't really spend that much time with that intensely, without saying, off you go for five minutes- it's constant.
Hannah: it's having that understanding that it's not only social things, its sensory needs- you know, a shirt can really hurt if it's tucked in, or a how painful a label could be.
Helen: I really warmed to him, I loved him, but he was a very very difficult character to work with.
Helen: I wouldn't feel confident, we've got a little boy with ASD sitting over there, and I have worked with him occasionally, but I wouldn't feel confident going in and sitting with him now and doing a whole days work with him, because I don't know him very well, and I don't know him well enough, so you need to establish the relationship first before you can move forward.